



Honors Worksheets



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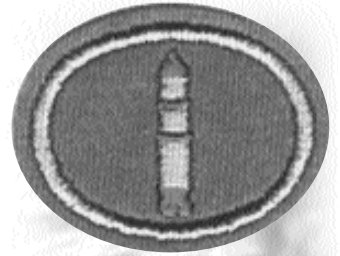
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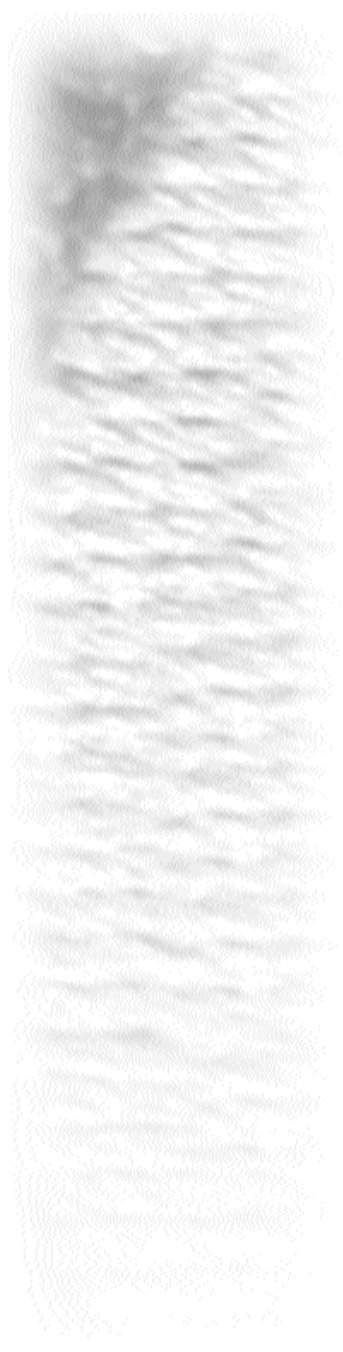
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Introduction

The Adventist Youth (AY) honors were introduced in 1928 with the objective of developing the physical, mental, and spiritual capacities of youth and adults. Each honor is designed to be a study that introduces a subject that has practical value, which will enhance the lifestyle of the person pursuing the honor. Honors are considered “windows to be opened in the mode of discovery” within the philosophical framework of the church.

This manual includes all honors currently recognized by the General Conference Youth Ministry department and also those specialized honors recognized by various Divisions. There is a wide selection of challenging honors to interest juniors through adults. Families, Pathfinder clubs, Master Guides and elementary school teachers can use honors as a tool to encourage the exploration of new interests and development of skills.

Skill Levels

Each honor is assigned a skill level to guide leaders in selecting grade-appropriateness. Skill levels are divided into Level 1 (Grade 5-6), Level 2 (Grade 7-10), and Level 3 (Grade 11 and above). These levels are recommendations designed to guide leaders in their choice of honors.

Instructors

Some honors require an instructor. The instructor may be a school teacher or a church or community friend who is qualified to give the necessary guidance to complete the honor. An individual who serves as the instructor for an honor receives a silver diamond pin that may be attached to their honor patch.

Honor Patches

The Conference Youth or Pathfinder Department is the source for honor patches, instructor diamonds, and advanced stars. Your Conference will have an order form and will give you directions on how to order. Patches are usually presented at Investiture or during a church service.

Advanced Honors

Many of the current honors have an advanced level. Over the next several years more advanced honors will be added. Honor patches are marked “advanced” with the addition of a small bronze star.

Master Awards

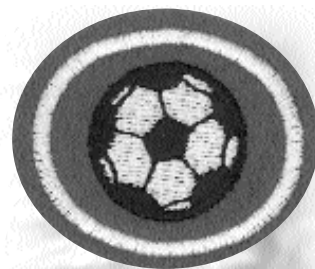
Master patches are earned by completing selected honors within a category. Requirements are listed at the beginning of each section.

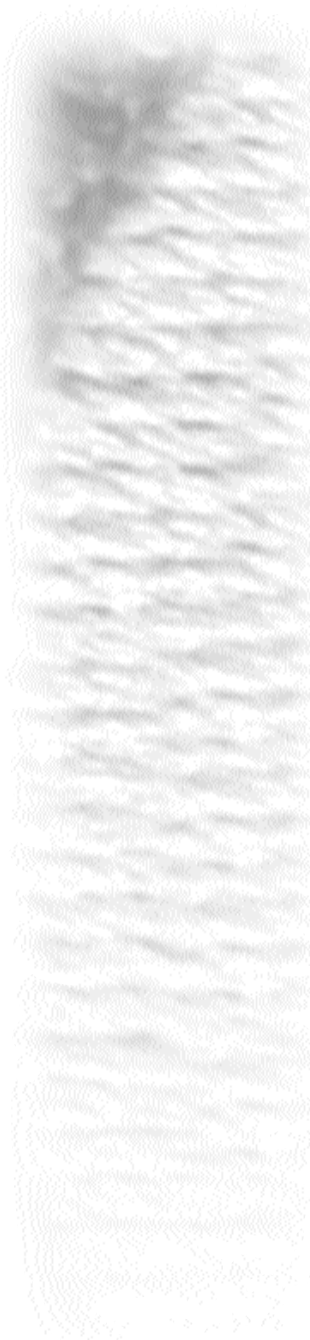
Resources

In past editions, a resources section has been included with each honor. Because of the rapid change in availability of books, you will find the resources listed at the beginning of each section. (ie. Arts, Crafts & Hobbies, Nature, etc.)

Honor Requirement Updates

For the latest information on honor updates and new releases go to www.pathfinders.nadadventist.org





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Pathfinder's Name

Airplane Modeling

- 1. Build and successfully fly an airplane from a kit made of balsa wood and tissue paper, and rubberband or gas powered.
- 2. Build a balsa wood glider from a kit and observe its flying characteristics as related to the variable positions of the wings.
- 3. Make and successfully fly two different styles of airplanes using sheets of paper between eight (20.3 cm) and fourteen (35.6 cm) inches in width and length.

Styles: 1. _____ 2. _____

- 4. Define, locate, and explain the usage of the following basic items:
(Complete chart)
 - a. Fuselage
 - b. Wing
 - c. Airelon
 - d. Rudder
 - e. Horizontal stabilizer
 - f. Strut
 - g. Cockpit
 - h. Engine
 - i. Landing gear
 - j. Propeller

Date completed _____

Instructor's Signature _____

Airplane Modeling Chart

Define, locate and explain the usage of the following

PART	DEFINITION	LOCATED (Y/N)	USAGE
Fuselage			
Wing			
Airelon			
Rudder			
Horizontal Stabilizer			
Strut			
Cockpit			
Engine			
Landing Gear			
Propeller			



Pathfinder's Name

Basketry

1. Know the names of two countries where Rattan (cane) is grown.
a. _____ b. _____
2. Explain how to treat pithcane (reed) before weaving.

3. What tools would you use for:
a. Cane basket making? _____

b. Raffia or Indian basket making? _____

4. Define:
a. Weaver singeing _____

b. Crushing _____

5. Explain how to:
a. Mend a broken spoke (stake). _____

b. Join a weaving rod (reed). _____

6. Name two kinds of bases used in baskets and tell in which type of basket each one can be used.
- | | Bases | Types of Baskets |
|----|-------|------------------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |

- 7. Describe how to lay:
 - a. A footridge border _____

 - b. A three-rod border _____

- 8. Do the following:

a. simple weaving	c. bispoking
b. slewing and	d. stitch a raffia base.

- 9. Make a cane sandwich tray with a wood base.

- 10. Make a hot roll basket with a woven base.

- 11. Make a round hot pad six inches (15.2 cm) in diameter in Raffia or Indian basketry.



Pathfinder's Name

Block Printing

1. List the tools and equipment necessary for block printing.

2. Write a paragraph on the principles of design and lettering as applied to block printing.

3. Using a potato, carve a design incorporating your initials into it, and use it to print your initials on paper.

4. Design and print at least one greeting card.

5. Design and print one bookplate or book cover.

6. Going through the steps of designing, carving, and printing, create another original piece of work of your choice.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Bread Dough

- 1. Make a list of materials and supplies needed for dough artistry.

- 2. Why is it important to have clean hands and use hand lotion while working with bread dough? _____

- 3. Explain the different techniques of tinting and painting the dough.

- 4. What type of finish do you use to protect and give a glossy appearance?

- 5. Make at least two different flowers with leaves and arrange into a container of your choice.
- 6. Make one of the following using tinted dough:
 - a. Sculpture arrangement
 - b. Small wall plaque
- 7. Make one of the following:
 - a. Kitchen refrigerator magnet
 - b. Pin
 - c. Choice of something you would like to make

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Cake Decorating

1. List equipment necessary for cake decorating.

2. Learn from memory the two cake icings-butter cream and royal-and their proper uses.

Buttercream: _____

Uses: _____

Royal: _____

Uses: _____

Name one other icing used for frosting: _____

3. Learn and demonstrate proper construction of the decorating tube using parchment, wax papers, or a disposable bag. Show proper method of inserting tip, brushing with color, filling with icing, and folding of top. What is the name of the top fold?

4. Name three essential steps to good cake decorating.

1. _____

2. _____

3. _____

- 5. Demonstrate pressure control with tubes. Learn the technique and name the proper tip (tube) used to make the following:

Techniques	Tip
a. Star, fill-in and border	_____
b. Rosette	_____
c. Shell border	_____
d. "S" design	_____
e. Ribbon	_____
f. Zigzag border	_____
g. Leaves	_____

- 6. Name four color techniques. Demonstrate two, including two-color icing.

1. _____ 2. _____
 3. _____ 4. _____

- 7. Learn to make the following flowers:

a. Sweet pea c. Full American beauty rose
 b. Rosebud d. Drop flower

- 8. Demonstrate writing technique using two different tips and methods.

Technique Used	Tip	Meothd
1. _____	_____	_____
2. _____	_____	_____

- 9. Decorate a doll cake or a cake prepared in a specialty cake pan using star fill-in method. Use at least two colors to make the design or pattern.

- 10. Make a special occasion cake of your choice using two or more borders of different types, and a floral arrangement.

- 11. Make a heart cake using borders, florets, string work, and writing.



Pathfinder's Name

Candlemaking

- 1. Make at least five of the following:
 - a. Free-form sand candle
 - b. Layered colored candle
 - c. Candle made in a mold
 - d. Ice candle
 - e. Dipped candle
 - f. Dribble-wax candle
 - g. Perfumed candle
 - h. Pair of beeswax candles
 - i. Floating candle
 - j. Candle in a container/jar
 - k. Decorated candle

- 2. Know the two kinds of wax used for candle making and their uses.

Waxes

Uses

- 3. Know sizes of wicking and which one will burn properly in each particular candle.

Size of wicking

Types of candles used in

4. When should a metal core wick be used?

5. Know the safety techniques of candle making.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Ceramics

1. Tell briefly the history of early ceramics.

2. Know what is meant by the following terms:

- a. Greenware _____
b. Bisque _____
c. Decal _____
d. Kiln _____
e. Glaze _____
f. Slip _____
g. Mender _____
h. Stain _____

3. Explain the use of cones in kilns.

4. Know how and when to use
underglaze _____

glaze _____

stain. _____

5. Know what tools are used in completing your projects in ceramics.

6. Know the difference between glaze and food-safe glaze.

Glaze _____

Food-safe glaze _____

7. Complete two of the following using underglaze on one, and the second one food-safe:

- a. Cookie jar
- b. Pie plate
- c. Vase
- d. Flower planter
- e. Candy dish
- f. Mug
- g. Item of your choice

Note: Candidate need not do the firing.



Pathfinder's Name

Counted Cross-Stitch

- 1. Have a tote with cross-stitch materials, including at least one hoop, masking tape or Fra-check, needles, and scissors.
- 2. What is the difference between cross-stitching, counted cross-stitch, and embroidery?

- 3. Know at least four stitches used in counted cross-stitch.
1. _____ 2. _____
3. _____ 4. _____
- 4. Cross-stitch a simple object in three different sizes of aida cloth. Mount and label the size and name of aida cloth used, stating how many floss strands are to be used with each.
- 5. Make a counted cross-stitch of a quote with a border and frame it for hanging, using at least three different stitches.
- 6. Make at least a 5 x 7 inches (12.7 x 17.8 cm) counted cross-stitch on aida-14 of a nature scene.

Date completed _____

Instructor's Signature _____



Pathfinder's Name _____

Crocheting

- 1. Define and crochet the following:
 - St _____
 - Sp _____
 - Sts _____
 - Rnd _____
 - Incl _____
 - Dec _____
 - Inc _____
- 2. Make squares of at least 20 stitches of the following:
 - a. SC
 - b. DC
 - c. HDC
 - d. TR
 - e. DTR.
- 3. Show how to measure stitch gauge or row gauge on sample squares.
- 4. Know how to care for items made out of the following:
 - wool _____
 - orlon _____
 - nylon _____
 - cotton _____
- 5. Know how to make a granny square, and show something you have made using a granny square, such as a hat, scarf, pillow cover, etc.
- 6. Show a sample of simple edging you have made out of thread.
- 7. Crochet one of the following out of yarn: hat, scarf, sleeveless sweater, or slippers.

Date completed _____

Instructor's Signature _____

Crocheting, Advanced

- 1. Have the Crocheting Honor.
- 2. Crochet a round doily out of thread.
- 3. Make fancy hairpin lace for a pillow case or similar object.
- 4. Crochet a sweater (not sleeveless) or baby set.
- 5. Crochet an afghan or a throw rug.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Currency (Coins)

1. Relate briefly the story of barter, showing three reasons why money came into being and naming at least ten strange forms of money used in place of coins or currency.

2. Relate briefly the history of coinage and paper currency in your country, making sure to mention the dates of the establishment of any mints or engraving plants. Also discover some change in the metal composition of a coin, giving any interesting highlights concerning such a change.

3. Explain how money is distributed in your country.

❑ 4. Define the following terms:

Alloy _____

Altered Date _____

Buffed Coins _____

Cast Coins _____

Clad Coinage _____

Commemorative _____

Die _____

Field _____

Inscription _____

Lettered Edge _____

Mint Mark _____

Obverse _____

Planchet _____

Proof _____

Reeded Edge _____

Reverse _____

Series _____

Type _____

Whizzed Coins _____

Wire Edge _____

- 5. Describe the obverse and reverse for paper money of the six lowest denominations currently in use in your country.

	Denomination	Obverse	Reverse
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

- 6. Know how coins are graded in quality by collectors.

- 7. Collect and mount a type set of coins from your country of any date currently being minted or in circulation. Proof, commemorative, rare, silver, or expensive coins are not needed. In your collection:
 - a. Possess at least one coin from each mint in the type set.
 - b. Locate and Identify the mint mark (if any) on each coin.
 - c. Locate and identify the initials (if any) of each coin's designer(s).

- 8. Do two of the following:
 - a. Make enlarged drawings of both sides of ten different denominations or forms of coins for your country no longer in circulation.
 - b. Collect, identify, and mount 25 different foreign coins. No two coins alike.
 - c. Collect and mount a type set of coins from your country minted during the 20th Century.
 - d. Collect and mount a date set of series of coins for your country beginning with your birth year. (Commemorative, gold, proof, expensive, or rare coins need not be included.)

Note: Facts About United States Money (free), Office of the Secretary of the Treasury, U.S. Treasury Department, Washington, D.C. 20025.

Facts about your country's currency may be obtained from the government treasury department.

Currency (Coins), Advanced

- 1. Have the Currency (Coins) Honor
- 2. Select a coin or note from your collection and present an oral or written report on the historical or other significance of the person(s), place(s), item(s) or symbol(s) found on both sides.
- 3. What are the laws regarding counterfeiting in your country and what devices are used in your nation's currency to prevent it?

- 4. Attend a meeting of a local coin club and report on your experience. Possible items to consider:
 - a. Level of expertise of members as demonstrated by presentations and dialogues.
 - b. Average general age of attendees.
 - c. Ideas which might help the club extend its collector interest to a wider audience.
 - d. How newcomer friendly is the organization.
 - e. Suggestions on how these people might be reached with the gospel through a manner which they would find attractive.
- 5. Select one of the three categories of your collection as required under the Currency Honor requirements 7 and 8, and increase your collection to include twice the total number of specimens.
- 6. Add to your collection at least one of the unusual (odd and curious) forms learned about in requirement 1 of the Currency Honor requirements and have in your Currency Honor files, at least a paragraph summarizing how, when and where this item was used as currency.



Pathfinder's Name _____

Decoupage

1. Give the meaning and history of decoupage

Meaning: _____

History: _____

2. Make a list of the materials and equipment needed in decoupage.

3. Describe how to prepare a wood or metal object for decoupage.

4. Describe three ways in which a print may be used in decoupage.

1. _____

2. _____

3. _____

5. Use the basic steps in completing two of the following objects:

a. Modpodge print

b. Keyring

c. Bookends

d. Bottle

e. Tissue box

f. Reasonable choice

Date completed _____

Instructor's Signature _____



Pathfinder's Name _____

Drawing and Painting

- 1. Make a freehand sketch of an animal, showing in values the distribution of color.
- 2. Draw a cylindrical object and a rectangular object grouped together a little below the eye, showing proper perspective, light, and shade.
- 3. Make a drawing of some landscape near your home.
- 4. Make an original decorative design in color, using any motif, and state for what use it is intended.
- 5. Paint in color a flower or leaf spray.
- 6. Paint an outdoor scene in either water color or oil.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Felt Craft

1. From what fiber is felt made?

What gives it its tensile strength?

2. List 15 uses of felt.

1. _____ 9. _____

2. _____ 10. _____

3. _____ 11. _____

4. _____ 12. _____

5. _____ 13. _____

6. _____ 14. _____

7. _____ 15. _____

8. _____

3. Give three reasons why felt is a good material for handicrafts.

1. _____

2. _____

3. _____

4. List the essential steps in felt manufacture.

- 5. Make two of the following, using at least two different colors of felt:
 - a. Pennant
 - b. Bookmark
 - c. Refrigerator magnet
 - d. Needle case
 - e. Similar item

- 6. Make one of the following, using at least four different colors of felt:
 - a. Small wall mural
 - b. Holiday decoration
 - c. Hand puppet
 - d. Kitchen knick-knack

- 7. Make one of the following, using sewing:
 - a. Stuffed animal
 - b. Stuffed toy
 - c. Tote bag
 - d. Bean bag



Pathfinder's Name

Flower Arrangement

1. Name six perennials and six annuals suitable for indoor flower arrangement.

Perennials

Annuals

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |
| 6. _____ | _____ |

2. Name at least three flowers that bloom in the spring or early summer suitable for indoor flower arrangement.

- | | |
|----------|----------|
| 1. _____ | 3. _____ |
| 2. _____ | |

3. Name at least three flowers that do not keep well when cut, and three that do.

Do not keep

Keep

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |

4. Give six suggestions regarding the cutting of flowers and their aftercare, such as when to cut, how to cut, and how to keep.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

5. At what stage of development should roses, gladioluses, and dahlias be cut?
- Roses _____
- Gladiolus _____
- Dahlias _____
6. Give three suggestions on the relation of containers to the flowers used, and three on the relation of arrangement to the room and furnishings.
- Containers to flowers
1. _____
2. _____
3. _____
- Arrangement to room
1. _____
2. _____
3. _____
7. In flower arrangement, what should be the relation of:
- Dark and light shades _____
- _____
- Large and small flowers _____
- _____
- Open and partly open flowers _____
- _____
8. Make two artistic flower arrangements in each of the following areas:
(Fresh or silk flowers may be used.)
- a. Table decoration
- b. General house use
- c. Public service

- ❑ 9. What are some wild flowers that could be used in arrangements for the home?

What combinations of these flowers can be used?



Pathfinder's Name

Glass Craft

1. Name ten kinds of glass.
- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |
2. Know what kind of glass is used for
- furniture _____
- _____
- cloth insulation _____
- _____
- airplanes _____
- _____
- automobiles _____
- _____
3. Prepare at least three colors of glass for picture making.
1. _____ 2. _____ 3. _____
4. Know the steps in making a picture with glass, and complete such a picture, using at least three colors.
- Steps _____
- _____
- _____
- Picture _____
- Colors 1. _____ 2. _____ 3. _____
5. Write a 300-word report or give a three-minute oral report on the history of glass and how glass is made.

Date
completed _____

Instructor's Signature _____

Arts, Crafts & Hobbies
General Conference



Pathfinder's Name

Glass Painting

1. Know the primary colors

1. _____

3. _____

2. _____

Know the secondary colors

1. _____

3. _____

2. _____

Know how to mix the primary colors to obtain the secondary colors.

Primary

Secondary

2. Know the materials used in painting, mounting, and hanging a glass painting.

3. Make and display a glass painting for each of the following designs:
animal, flower, and landscape or seascape.
4. Make a silhouette painting and mount for hanging.
5. Make a hand-painted mirror picture by removing the back coating of the mirror from the picture area and painting the design on the back of the mirror glass.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Knitting

1. Define the following:

K _____

P _____

STS _____

RND _____

TOG _____

PPSO _____

INC _____

DEC _____

YO _____

2. Demonstrate the following:

a. Cast on

b. Bind off

c. Cable stitch

d. Ribbing

e. Garter stitch

f. Stockinette stitch

g. Pick up a dropped stitch

3. Know how to care for these kinds of yarn:

Wool _____

Hair _____

Synthetic _____

4. Show how to join on a new ball of yarn.

- ❑ 5. Identify and know the purpose of the following weights of yarn:
Medium _____

Sports _____

Heavy _____

Bulky _____

- ❑ 6. Knit two items from the following:
 - a. Slippers
 - b. Mittens
 - c. Baby booties
 - d. Hat
 - e. Scarf
 - f. Sleeveless sweater
 - g. Reasonable choice

Knitting, Advanced

- 1. Have the Knitting Honor.
- 2. Knit a pair of argyle or patterned socks, gloves, or some other article, using four needles and yarn bobbins.
- 3. Knit an afghan or a baby blanket.
- 4. Knit a sweater with long sleeves or a baby set of sweater, bonnet, and booties.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Leather Craft

1. List the necessary tools a beginner needs in leather craft and demonstrate the proper use of each.

2. Know how to distinguish different kinds of leather, such as calf, goat, and imitation leather. What leathers are most suitable for tooling?

3. Give the steps necessary in the preparation of leather.

4. Transfer a design to leather, and tool and lace some object in leather, such as a billfold, magazine cover, belt, key keeper, or small purse.

5. Show how to use leather dye.

6. What kind of finish should be used on leather?

Date completed _____

Instructor's Signature _____

Leather Craft, Advanced

- 1. Have the Leather Craft Honor.
- 2. Show how to:
 - a. punch holes
 - b. set snaps
 - c. do saddle stitching
 - d. do two types of lacing.
- 3. Make a sheath for a hatchet, knife, or ax.
- 4. Complete a figure-carved belt, doing your own tooling.
- 5. From your own design, cut from leather, tool, punch, and lace a project such as a case, purse, bag, or an equivalent.
- 6. Show six leather items you have made.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____



Pathfinder's Name

Lettering and Poster Making

- 1. Write from memory the complete lower case alphabet in two of the following:
 - a. Gothic
 - b. Roman
 - c. Italic
- 2. Demonstrate when the different sizes and types of pens are to be used.
- 3. State at least four principles in making a poster attractive and distinctive.

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Know how to make correct margins for the size of paper you are using.

- 4. Make three posters in a variety of sizes to be used by any of the following groups: Sabbath School, church, school, Pathfinder Club, or AY Society. Use at least two different types of lettering in these posters.

	Where Used	Size	Types Used
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

- ❑ 5. Make five additional posters on topics of your own choice. These posters will be judged for acceptance on the following three conditions:
 - a. Arrangement
 - b. Neatness
 - c. Selection in type of lettering used.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____

- ❑ 6. Practice all strokes until they can be done smoothly and accurately.



Pathfinder's Name _____

Macramé

1. Give a brief history of the art of decorative knotting.
- _____
- _____
2. What is a good macramé cord? _____
- _____
3. Know three kinds of cords that are good and why they are good.
- | Cord | Why |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
4. Know the basic knots used in macramé. Know two variations of each of these knots.
- | | | |
|-------|-------|-------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
5. How is the overhand knot useful in macramé?
- _____
- _____
6. How much cord is needed to reach the desired length of the finished product?
- _____
- _____
7. Make a sampler wall hanging using the essential knots and using at least two variations, such as the horizontal half-hitch, vertical half-hitch, or the half knot.
8. Make two other items of your choice using the square knot, the double half-hitch, and two variations of either or both items.

Date completed _____

Instructor's Signature _____

Arts, Crafts & Hobbies
General Conference
2002 Edition



Pathfinder's Name

Metal Craft

- 1. Name the various metals that can be used in metal craft.

- 2. Complete one project using metal foil tooling. Complete the project by antiquing and framing.
Project: _____
- 3. Complete one project using metal punch.
Project: _____
- 4. Complete one project using drilling, riveting, and bending of metal such as a simple candle holder.
Project: _____
- 5. Demonstrate properly the use of the following:
 - a. Tin Snips
 - b. Pop rivet
 - c. Electric drill
 - d. Metal file

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Model Boats

1. Do two of the following:
- a. Purchase and build one kit for a sailboat 10 to 15 inches (25.4 to 38.1 cm) long and about four to five inches wide and operate boat on the water for at least two minutes.
 - b. Build a model boat with an electric motor from your own plans or from a kit, size 10 to 18 inches, (25.4 to 45.7 cm) and operate the boat for three to five minutes.
 - c. Build a model boat 18 to 30 inches (45.7 to 76.2 cm) long from your own plans or from a kit. Install a small bore internal combustion engine .029 or .049 and operate for at least two successful runs of three to five minutes each. Record in writing the operating characteristics of the model and state what you did to improve its performance.

2. Identify and define these words:

Displacement _____

Center of gravity _____

Propeller pitch _____

Thrust and lift _____

Mono hull _____

Hydro _____

Bow _____

Keel _____

Transom _____

Cavitation _____

Heeling _____

Planing _____

Drag _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name _____

Model Cars

- 1. Build at least one plastic model car from the parts supplied in a kit. Car must be stock in every respect.
- 2. Build a second car using extra accessories included in the kit or create alterations using putty and/or parts from other kits. (Decals don't count). Include paint job.
- 3. Write or give orally a report on the history of automobiles. Be sure to include interesting steps in the development process such as notes on engine sizes, automatic transmissions, power steering, computerized controls, etc.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Model Railroading

1. Give the history and development of model railroading.

2. Tell the difference in how the following prototype motive power units operate:
Steam _____

Diesel _____

Electric _____

3. Know the name, scale, and track gauge for four model railroad gauges.

Name	Scale	Track Gauge
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

- ❑ 4. Know the shapes and names of at least eight track plan arrangements.

1. _____

5. _____

2. _____

6. _____

3. _____

7. _____

4. _____

8. _____

- ❑ 5. Know at least six points to check for the maintenance of a model railroading layout.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

- ❑ 6. Identify and explain the use of:
Five types of freight cars

Types Identified

Use

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |

Three types of passenger cars

Types Identified

Use

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |

Three types of steam engines according to their wheel arrangement

Types Identified

Use

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |

Two types of grade crossing warning devices

Types Identified

Use

- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |

Two types of railroad signals

Types Identified	Use
1. _____	_____
2. _____	_____

Five types of railroad-related buildings or structures

Types Identified	Use
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

7. Know the meaning of the following model railroad terms:

Ballast _____

Blind drivers _____

Block _____

Bolster _____

Crossing _____

Crossover _____

Double header _____

Draft gear _____

Flange _____

Frog _____

Gap _____

Gauge _____

Grade _____

Gravity yard _____

Hot box _____

Insulated rail joiner _____

Journal _____

Layout _____

Mainline _____

Prototype _____

Rail joiner _____

Reverse loop _____

Siding _____

Spur _____

Switch _____

Machine _____

Talgo truck _____

Talgo truck _____

Turnout _____

Two-rail _____

Wye _____

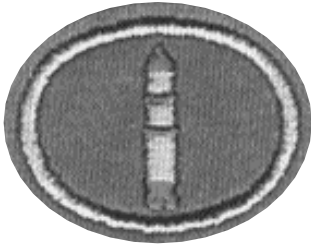
Y switch _____

Yard _____

- 8. Construct a portion of a model railroad layout. In your construction, do the following:
 - a. Assist in assembling the framework
 - b. Install a section of ballast
 - c. Install a section of track
 - d. Install at least one turnout, including the wiring
 - e. Assist in making scenery, such as trees, rocks, mountains, or grass
 - f. Make one model railroading building or structure
 - g. Assist in the wiring to supply electrical power to the tracks
- 9. Successfully operate a model railroad train on the layout you have assisted in building.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Model Rocketry

(Instructor Required)

1. Know and explain the Model Rocketry Safety Code.

2. Know and explain the importance of the basic model rocket components.

3. Draw the following:
The steps in the flight of a model rocket

A cut-a-way view of a model rocket engine, labeling each part

A schematic plan for a simple launch system using proper electrical symbols

❑ 4. Define the following:

Wadding _____

Boost gliders _____

Stall _____

Payload _____

Apogee _____

Center of gravity _____

Center of pressure _____

Impulse _____

Velocity _____

Ejection _____

5. Name and describe at least four different recovery systems.

Name	Description
1. _____	_____ _____ _____
2. _____	_____ _____ _____
3. _____	_____ _____ _____
4. _____	_____ _____ _____

6. From a kit, build, finish, and paint a single-stage rocket that has a minimum length of six inches with a recovery system, such as a parachute or streamer. Successfully launch and recover the rocket with the recovery system deploying properly.
Launch date: _____

Model Rocketry, Advanced

(Instructor Required)

- 1. Have the Model Rocketry Honor.
- 2. From a kit, build, successfully launch, and recover a boost glider.
Launch date: _____
- 3. Design, build (not from a kit), finish, and paint a single-stage rocket. Check for stability, and successfully launch and recover this rocket.
Launch date: _____
- 4. Do one of the following:
 - a. From a kit build, finish, and paint a two-stage rocket. Successfully launch and recover this rocket.
 - b. From a kit, build, finish, and paint a three-engine clustered single-stage rocket. Successfully launch and recover this rocket.
 Launch date: _____
- 5. Design an electrical launch system. When this has been approved by your instructor, build this system and use it to launch rockets at least five times.
Launch date: 1. _____
2. _____
3. _____
4. _____
5. _____
- 6. Describe and demonstrate single station altitude tracking.

Date demonstrated: _____

With the aid of a helper, track the same rocket three times using three different sizes of engines and compare altitudes with an altitude finder.

	Engine Size	Altitude
1.	_____	_____
2.	_____	_____
3.	_____	_____

7. Compare the velocity and altitude of two different weights of rockets using the same size engine.

	Rocket Weight	Velocity	Altitude
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____



Pathfinder's Name

Music

(Instructor Required)

- 1. Play or sing a scale and know its composition.
- 2. Write a scale in both treble and bass clef.

- 3. Know the following
 - a. half-tone
 - b. a whole tone
 - c. a third
 - d. a fifth
 - e. an octave.
- 4. Distinguish a march from a waltz and give the time of each.

March _____ Waltz _____

- 5. Define the following: Draw the symbols of each.

A quarter note

A half note

A whole note

6. Name five great composers and one composition of each, including an oratorio, a piano composition, and a song.

	Composer	Composition
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

7. Play with or without music or sing from memory 15 hymns (one verse or stanza each) and/or other sacred songs or choruses and list the composer of each.

	Hymn/Chorus	Composer
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____
15.	_____	_____

8. Play or sing from memory one piece of good music other than those used in #7.

Music: _____

9. Do one of the following:
- a. For instrumentalists, be able to sight-read and play a moderately difficult piece of music. Explain all signs and terms in it.

Music: _____

- b. For singers, show with baton or arm how to lead a group in singing compositions written in 3/4 and 4/4 time.

Music: _____

10. Define orchestra

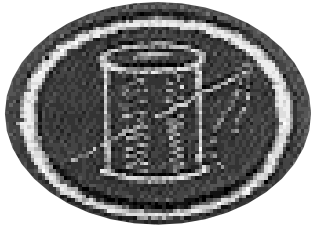
Name at least five instruments in an orchestra.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

11. Do a biographical sketch on a famous hymn writer and orally present it to a group.

Hymn writer: _____

Date presented: _____



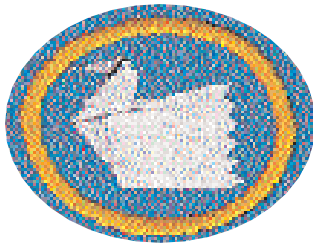
Pathfinder's Name

Needle Craft

1. Do two of the following:
- a. Embroider one of the following: dresser scarf, pair of pillowcases, luncheon cloth, or other equivalent article.
 - b. Make a pillow cover or wall hanging, a set of four sachet pillows, or three tree ornaments out of any of the following methods:
 - (1) Punch embroidery
 - (2) Candlewicking
 - (3) Crewel
 - c. Make a pillow cover, wall hanging, cover for chair, footstool, or piano bench in needlepoint or counted cross stitch.
 - d. Make an article using any of the following methods:
 - (1) Applique
 - (2) Fagoting
 - (3) Smocking
 - (4) Shirring
 - (5) Swedish weaving on linen or huck toweling
2. Show articles you have made, using ten of the following stitches:
- | | |
|------------------|-------------------|
| a. Back | l. Herringbone |
| b. Blanket | m. Lazy daisy |
| c. Braid | n. Long and short |
| d. Buttonhole | o. Outline |
| e. Roman | p. Running |
| f. Chain | q. Satin |
| g. Cross | r. Split |
| h. Feather | s. Star filling |
| i. Fishbone Stem | t. Stem |
| j. French knot | u. Whipping |
| k. Heavy chain | |
3. Show the correct way of gathering lace and whipping it to hemmed edge.
4. Describe a satisfactory method of keeping your fancy-work equipment in good equipment.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Origami

1. What is Origami?

Where did it come from?

How was it used and developed?

2. Identify the symbols for the following terms:
- | | |
|--------------------|--------------------------------------|
| a. Valley fold | g. In front |
| b. Mountain fold | h. Behind |
| c. Cut | i. Tuck in, open out, or apply force |
| d. Existing crease | j. Fold over and over |
| e. Hold here | k. Turn model over |
| f. Watch this spot | |
3. Demonstrate folding the following folds:
- | | |
|-----------------|---------------------|
| a. Reverse fold | d. Book fold |
| b. Squash fold | e. Preliminary fold |
| c. Petal fold | f. Blintz fold |
4. Demonstrate folding the following bases:
- Bird base
 - Waterbomb base
 - Frog base
5. Do three of the following models:
- | | |
|------------------|--------------|
| a. House | d. Housefly |
| b. Lotus blossom | e. Butterfly |
| c. Cicada | |

6. Choose three of the following models to fold or select similar models from Origami books:

- | | |
|--------------------------|-----------------------|
| a. Jumping Frog | e. Leaf |
| b. Carrier Pigeon | f. Walking dog |
| c. Sailboat | g. Duck |
| d. Hen | |

7. Fold one model of your choice from memory from requirement 5 or 6.
Model _____

8. Illustrate a Bible story using several Origami models.
Bible Story _____
Models used _____



Pathfinder's Name

Photography

1. Explain the principles of camera construction

What the camera lens does

The effect of light on light-sensitive film

The action of developers

2. What is meant by the "speed" of the film

What does ASA/ISO mean?

3. How are shutter speed, lens aperture, and film speed related?

4. Give the principal uses of photography.

5. Take print or slide pictures illustrating at least eight of the following techniques. Use comparison pictures for illustration:

- a. Framing
- b. Camera steadiness
- c. Direction of lighting - front, backlighting, side
- d. Panning - background blurred with subject in focus
- e. Rule of thirds
- f. Angle - eye level, high and low angle
- g. Level horizon
- h. Distance from subject - fill the frame
- i. Use of leading lines
- j. Quality of light - shade, sunlight, and time of day
- k. Correct exposure - underexposed, overexposed, and correctly exposed
- l. Use of flash - distance and reflective objects

6. Do one of the following:

- a. Tell how black and white film is developed into negatives and print eight of your own pictures.
- b. Tell how slides are made and develop one roll of film.



Pathfinder's Name

Plaster Craft

- 1. What is the principal ingredient of plaster of Paris?

- 2. Give the steps in pouring a plaster item and preparing it for painting.

- 3. Know how to remove air bubbles from a poured item.

- 4. Know how the setup time can be increased or decreased for plaster.

- 5. What precautions should be taken when cleaning the mixing and pouring equipment?

- 6. When is a sealant applied to a plaster item and why?

- 7. What type of paint is best to use on plaster craft items?

- ❑ 8. Paint three items that will include the following designs and techniques or equivalent:
 - a. Floral to show shading
 - b. Fruit to show highlighting
 - c. Animal to show fine line or detail
 - d. Religious motto to show letter highlighting

Items painted

- 1. _____ 3. _____
- 2. _____

- ❑ 9. Mold and paint two additional items of different designs.

Items molded and painted

- 1. _____ 2. _____



Pathfinder's Name

Plastics

1. Make a list of the materials and equipment used in making small castings in plastic molds.

2. Know how to clean and properly take care of plastic molds.

3. What safety precautions should be used when working with plastics?

4. Tell how to mix resin for casting and colored layers.

Casting _____

Colored layers _____

5. Why are the following used?

Catalyst _____

Surface hardener _____

Pigments _____

6. What is meant by polymerization?

- 7. Prepare and embed two nature items suitable for embedding. Nature items may be embedded in one or more castings.

Nature items: 1. _____ 2. _____

- 8. Make three castings with at least one item embedded in each casting.

Castings	Item Embedded
1. _____	_____
2. _____	_____
3. _____	_____



Pathfinder's Name

Pottery

1. Write or explain orally the different types and uses of pottery and the materials used in making it.

2. What is the purpose of a glaze?

Describe the specific dangers to be avoided.

3. Design and draw two pottery forms, one of which must be decorated.

Forms: 1. _____ 2. _____

4. Do three of the following. Each project is to be decorated, such as painted, glazed, or indented:

- a. Using the coil method, make a jar or vase.
- b. Using the slab method, make a box.
- c. Using the pinch pottery method, make one object.
- d. Design and make four different tiles.
- e. Make a tray or dish.
- f. Throw a simple vase on a potter's wheel.

Date completed _____

Instructor's Signature _____



_____ **Pathfinder's Name**

Sculpturing

1. List the tools and materials used in simple sculpturing.

2. Model two or more examples of toy animals, using a sculpture medium.

1. _____ 2. _____

3. Make a model of the human hand or foot, using a sculpture medium.

4. From a living model, make a statue "in the round" of the human head, using a sculpturing medium (not necessarily life size).

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Silk Screen Printing

1. List the tools and equipment necessary for silk screen printing.
- _____
- _____
- _____
2. Name three kinds of inks suitable for silk screen printing.
1. _____ 3. _____
2. _____
3. List at least three industrial uses of the silk screen process.
1. _____
2. _____
3. _____
4. Tell how bottles and round surfaces are printed.
- _____
- _____
- _____
5. Make a design, transfer the design to a screen, and screen print one of the following projects:
- a. At least ten greeting cards
 - b. At least three posters
 - c. Print a design on fabric
 - d. Comparable project of your choice

Date completed _____

Instructor's Signature _____

Silk Screen Printing, Advanced

- 1. Have the Silk Screen Printing Honor.
- 2. Properly stretch and secure silk screen fabric to a frame.
- 3. Know what fabrics can be used in silk screening and the advantages of each.

Fabric	Advantage

What factors influence the choice of mesh count for the screen?

- 4. Understand and use each of the following silk screen printing techniques:
 - a. Hand cut film stencil method
 - b. Photographic method
 - c. Resist method
- 5. Use two of the following techniques in meeting requirement 4:
 - a. Print a design using two or more colors in proper registration
 - b. Print a repeat or all-over design
 - c. Print a three-color design using only two colors of ink
- 6. Print on a material other than paper or fabric, such as glass, metal, or leather.

Project: _____



Pathfinder's Name

Soap Craft

1. What ingredients are used to make soap?

2. What is the difference between soap and detergent?

Soap: _____

Detergent: _____

3. What causes the cleansing action of soap?

4. Write or tell a story about the history and origin of soap.

5. Name seven forms of soap.

1. _____ 5. _____

2. _____ 6. _____

3. _____ 7. _____

4. _____

6. What is scum?

- 7. Carve an object from a bar of soap.

Object: _____

- 8. Decorate a bar of soap for a gift.

Decorations: _____

- 9. Make a scene out of whipped soap, using at least three colors.

Scene: _____

Colors **1.** _____ **3.** _____
 2. _____

Soap Craft, Advanced

- 1. Have the Soap Craft Honor.
- 2. What types of fats can be used in making soap?

- 3. What is used in making soap transparent?

- 4. What are the advantages and disadvantages of soap and detergent?

	Advantages	Disadvantages
Soap	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
Detergent	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>

- 5. What are some cleaning aids added to soap mixtures?

- 6. What makes soap float?

- 7. What makes soap hard?

- 8. Learn the following verses:
 Jeremiah 2:22
 Malachi 3:2.

9. Explain two methods of making soap. Make a batch of soap by one of these methods.

1. _____

2. _____

Method used: _____

10. Do one of the following:

- a. Visit a soap-making establishment, commercial or non-commercial.
- b. Obtain information from a soap-making firm about how soap is made.
- c. Study and prepare from an encyclopedia or another source a one-to two-page report that explains how soap is made.



Pathfinder's Name

Stamps

1. Relate briefly the story of the beginning of the postal service in your country.

2. How is the history of your country told in postage stamps?

3. What are the rates for first-class mail in your country?

4. What country does not have its name on its stamps and why?

Country: _____

Why: _____

5. Know the meaning of the following:

Coil stamp _____

Booklet stamp _____

Perforations _____

Perforation gauge _____

Definitive stamps _____

Commemorative stamps _____

Hinges _____

Plastic mounts _____

- 6. Have a knowledge of how to soak stamps from paper and how to dry them.

- 7. Make a collection of at least 750 stamps. (No two stamps alike.)

- 8. Properly classify these stamps:
 - a. As to country.
 - b. In series; that is, according to year and design.

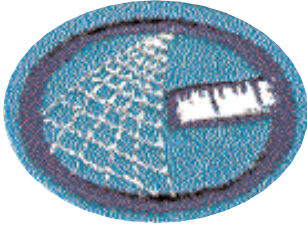
- 9. Mount your stamps with gummed hinges or plastic mounts. (Plastic mounts are preferred for mint stamps.)

- 10. Choose a topical idea and develop a display of at least nine pages, including a title page, suitable for a stamp club show, Pathfinder Fair, etc. Display should be artistically arranged, neatly labeled and mounted, showing careful thought and research. Be sure to include several covers or cachets.

Topical idea: _____

Stamps, Advanced

- 1. Have the Stamp Honor.
- 2. Know the meaning of the following:
 - Cancellation _____
 - Perfins _____
 - Blocks _____
 - Plate blocks _____
 - Precanceled _____
 - First day covers _____
 - Cachets _____
 - Souvenir sheets _____
 - Watermarks _____
 - Tongs _____
- 3. Make a display of at least 16 pages suitable for a stamp club show, Pathfinder Fair, or Junior Youth Philatelic Stamp Show. Display should be artistically arranged, neatly labeled and mounted, showing careful thought and research. Cachets and covers should be used as well.
- 4. Make a collection of 750 additional stamps with at least 50 stamps from each of five foreign countries.
- 5. Name two different catalogs for identifying stamps.
 - 1. _____
 - 2. _____
- 6. Using a stamp catalog, identify and mount according to catalog number and country.
- 7. Mount your stamps with gummed hinges or plastic mounts. (Plastic mounts are preferred for mint stamps.)



Pathfinder's Name _____

String Art

- 1. Describe the following:
 - string craft _____
 - _____
 - symmography _____
 - _____
 - geometric stitchery _____
 - _____

- 2. Draw and stitch on cardboard in equally spaced points:
 - a. A right angle
 - b. An acute angle
 - c. An obtuse angle

- 3. Name three ways to prepare wood for string art.
 - 1. _____
 - 2. _____
 - 3. _____

- 4. Using stringing methods on wood, do four of the following:
 - a. Filled circle
 - b. Hollowed circle
 - c. Star
 - d. Edging
 - e. Curve from within
 - f. Curve from without
 - g. Filler
 - h. Wing weave

- 5. Complete one original string art hanging on wood for display.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Textile Painting

1. Know the best types of material for painting and how to prepare them for painting.
- _____
- _____
- _____
2. Know how to trace and transfer a pattern onto the material.
- _____
- _____
- _____
3. How much time should be given for paint to dry?
- _____
- _____
- _____
4. Demonstrate the centering of patterns on material.
5. Properly clean brushes after they have been used, or if using tube paints, properly care for tubes and tips.
6. Paint three different designs, using paint brushes on at least two, using the following techniques:
- a. Highlighting
 - b. Shading
 - c. Fine line
- Designs: 1. _____ 3. _____
2. _____
7. Using a stencil, paint an item with at least two colors.
- Items: 1. _____ 2. _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Weaving

1. Describe the principle involved in most weaving procedures.
- _____
- _____
- _____
2. Define the following:
- Warp _____
- _____
- Woof _____
- _____
- Shuttle _____
- _____
- Yarn beam _____
- _____
- Heddle _____
- _____
- Cloth beam _____
- _____
3. Make a cardboard hand loom on which an envelope purse can be woven.
4. Design and weave a table runner or towel, using at least three different colors.
5. Make a jersey looped potholder.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Wood Carving

1. Explain the qualities of hard and soft woods and the best woods for wood carving.

Hardwood: _____

Soft Wood: _____

Best woods for carving: _____

2. Describe the different wood carving tools and explain how to sharpen them.

3. Explain the best methods of handling the grain of wood in designing.

4. Design and carve a plaque in low relief.

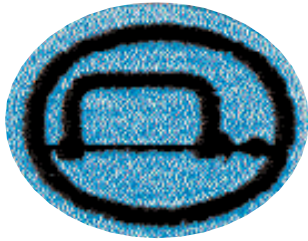
Design: _____

5. Design and carve two of the following items:

- a. Whistle
- b. Letter opener
- c. Tray
- d. Bookends
- e. Clock case
- f. Equivalent items of your choice

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Wood Handicraft

1. Identify at least five common kinds of wood, such as pine, walnut, oak, and cedar.

Woods Identified: 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

2. Know the characteristics for the woods identified, and know one use for each example.

Characteristics	Use
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

3. What is the difference between hard and soft wood?

Hardwood: _____

Soft Wood: _____

4. Know how to properly use the following tools in wood handicrafts:

a. Coping saw
b. Rasp
c. Plane
d. Knife
e. Chisel
f. Sanding block

- 5. Know at least two safety procedures for each of the above tools.
 - a. 1. _____
 - 2. _____
 - b. 1. _____
 - 2. _____
 - c. 1. _____
 - 2. _____
 - d. 1. _____
 - 2. _____
 - e. 1. _____
 - 2. _____
 - f. 1. _____
 - 2. _____

6. Cut out, assemble, and finish animal bookends or doorstop.
 Project: _____

7. Cut out and finish a garden stake or lawn marker, using a design such as a child, bird, flower, or tree.
 Project: _____

8. Make a plaque, tray, notebook cover, or some other useful object in which wood burning is used.
 Project: _____

Date completed _____

Instructor's Signature _____

Date completed _____

Instructor's Signature _____

Skill Level 2

Original Honor 1999

Date completed _____

Instructor's Signature _____

(Continued next page)

Date completed _____

Instructor's Signature _____

Date completed _____

Instructor's Signature _____

Arts, Crafts & Hobbies
General Conference
2002 Edition

Date completed _____

Instructor's Signature _____

Date completed _____

Instructor's Signature _____

Health & Science

Basic Rescue

Blood and the Body's Defenses

Bones, Muscles and Movement

Brain and Behavior

CPR

Chemistry

Child Care - Babysitting

Euro Africa Division

Digestion

First Aid, Basic

First Aid, Standard

First Aid, Advanced

Health & Healing

Heart & Circulation

North American Division

Heredity

North American Division

Home Nursing

Optics

Physics

Red Alert



Pathfinder's Name

Basic Rescue

1. What is the definition of an emergency rescue?
- _____
- _____
- _____
- _____
2. Show how to safely rescue a person from the following situations:
- a. Being in contact with a live electric wire
 - b. A room filled with fumes or smoke
 - c. Clothes on fire
 - d. Drowning using a non-swimming rescue
 - e. An ice accident
3. Show three ways of attracting and communicating with rescue aircraft.
- 1. _____
 - 2. _____
 - 3. _____
4. Know six indications for the need of an immediate rescue.
- 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
5. Know six procedures to follow before moving a victim from a life-threatening situation.
- 1. _____
 - 2. _____
 - 3. _____

- 4. _____
- 5. _____
- 6. _____

6. Know five principles involved in moving a victim from a life-threatening situation

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

7. Know the proper ways to help a victim, without assistance, in the following:

Pulling the victim _____

Lifting the victim _____

Assisting a victim in walking _____

8. Know the proper way to help a victim, with assistance, in the following:

Chair carry _____

Fore-and -aft carry _____

Two-handed and four-handed seats _____

Blanket carry _____

Three-man hammock carry with victim in supine and prone position

Three- or four-man lift _____

Six-man lift and carry _____

- 9.** Know how to properly use a stretcher and carry a victim on a stretcher.

Know how to make an improvised litter.

- 10.** Know how to properly use ropes and knots as follows:
 - a.** Tie knots for joining ropes together
Knots Tied: _____
 - b.** Tie knots for shortening a rope
Knots Tied: _____
 - c.** Tie knots for use around a person for a rescue
Knots Tied: _____
 - d.** Coil and accurately throw a light and a heavy 50-foot (15.2 m) rope.

- 11.** What steps should be taken before reporting a lost person?

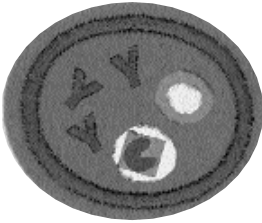
What information will be needed when reporting a lost person?

How is a search for a lost person conducted in a wilderness area?

Date completed _____

Instructor's Signature

**Basic Rescue
2002 Edition**



Pathfinder's Name

Blood and the Body's Defenses

- 1. Have the Microscopic Life Honor.
- 2. Name the two major constituents of blood. What is the percentage of each in normal blood.

Constituents

Percentage

1. _____
2. _____

- 3. Be able to draw pictures of and name the 7 types of blood cells and indicate what each type does.

1. _____
5. _____

2. _____
6. _____

3. _____
7. _____

4. _____

- ❑ 4. Observe some preserved human blood under a microscope. Count 100 white blood cells and draw a graph showing the number of each of the five types of white blood cells that you found.

Blood Cells

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

Graph

Which type is most common?

Which is least common?

- ❑ 5. Do at least one of the following and report on what you observed:
 - a. Observe blood being drawn from someone's arm by a medical professional.
 - b. With the help of an experienced person, observe blood flowing through some capillaries (either on video tape or in a living organism (such as hamster cheek-pouch, frog skin, or goldfish tail) using a microscope.
 - c. Visit a medical laboratory where blood tests are performed.
 - d. Visit a blood bank.
- ❑ 6. What two gases are transported by the red blood cells?
 - 1. _____
 - 2. _____

Explain why blood appears blue/green in your veins but if you cut yourself, the blood that comes out is bright red.

Explain why a lack of iron in your diet might make you have yellowish-colored blood.

7. Explain how blood clots when you are injured.

How does typical "First Aid" help in this process?

8. What does it mean to be a blood donor?

If possible, know your own blood type. _____

What types of blood can be donated to you?

Which blood types cannot be donated to you?

Why?

9. Tell two stories in the Bible in which blood is involved.

Stories: 1. _____
2. _____

From what you know about blood, why do you think that the Bible uses blood as a symbol of God's saving power?

10. List 10 specific health habits that can help your body stay healthy and fight off infection. Find a reference from the Spirit of Prophecy that supports each one of these.

Habits

References

Habits	References
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

11. Define the following terms relating to the body's defenses:

immunology _____

pathogen inflammation _____

antibody _____

memory cells _____

immunity _____

vaccine _____

allergy _____

histamine _____

antihistamine _____

12. Poison Ivy and poison Oak are plants commonly encountered by active Pathfinders.

Identify Poison Ivy and Poison Oak

Poison Ivy _____

Poison Oak _____

How to avoid an allergic reaction _____

Explain what to do if you get an allergic reaction to either.

13. Make a list of as many as possible of the infectious diseases that you have had.

Diseases _____

Which ones are you now immune to? Explain why or why not.

Disease

Why or why not?

_____	_____
_____	_____
_____	_____

14. From your personal medical records, list all the vaccines that you have had and determine from your doctor when your next vaccination should be.

Vaccines

_____	_____
_____	_____
_____	_____

Next one: _____

15. Write or tell about one infectious disease (at least 250 words).

16. What is AIDS?

How is it spread?

Is there a cure?

Why is it so devastating?

17. Find three biblical references that have to do with cleanliness and the control of or spread of disease.

1. _____ 3. _____

2. _____



Pathfinder's Name

Bones, Muscles, and Movement

1. What's the difference between exoskeletons and endoskeletons?

Exoskeltons _____

Endoskeletons _____

Which type of skeleton do humans have?

2. List three functions of the skeletal system

1. _____

2. _____

3. _____

3. Is bone a living tissue? _____

Explain why or why not.

4. Describe the structure and development of bone.

5. Identify the following bones of the skeletal system:

Carpals _____

clavicle (collar bone) _____

cranium _____

femur _____

fibula _____

humerus _____

mandible _____

maxillary bones _____

metacarpals _____

metatarsals _____

patella _____

pelvis _____

phalanges _____

radius _____

ribs _____

scapula (shoulder blade) _____

coccyx (tail bone) _____

sternum (breast bone) _____

tarsals _____

tibia _____

ulna _____

vertebrae _____

6. What is a joint?

7. List the three types of joints found between bones.

1. _____ 3. _____

2. _____

8. Name and describe six types of freely movable joints. Be able to locate an example of each of these in your body.

1. _____ 4. _____

2. _____ 5. _____

3. _____ 6. _____

9. Be creative and construct a model of one of the six freely movable joints.

10. What is another name for a broken bone?

List 3 types of breaks that can occur in bones.

1. _____ 3. _____

2. _____

Describe how bones heal and how doctors can help this process.

- ❑ 11. What is osteoporosis?

Who can get it?

List at least 5 health habits that deal with maintaining healthy bones and muscles.

1. _____ 4. _____
2. _____ 5. _____
3. _____

- ❑ 12. What is the function of the muscular system?

- ❑ 13. Name and describe three types of muscle tissue. Give one example of each.

Muscle Tissue	Example
1. _____	_____
2. _____	_____
3. _____	_____

- ❑ 14. Be able to identify the following muscles on your body:

- a. Masseter
- b. Trapezius
- c. Deltoid
- d. Pectoralis
- e. Biceps

- f. Abdominal
- g. Quadriceps
- h. Triceps
- i. Latissimus dorsi
- j. Gluteus maximus
- k. Hamstrings
- l. Gastrocnemius
- m. Soleus.

15. Describe the process that causes a muscle to contract.

16. Describe the difference between voluntary and involuntary muscles.

Voluntary _____

Involuntary _____

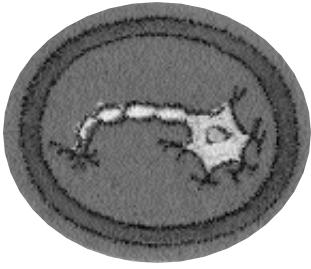
17. Using your model in # 9, show how muscles, bones, and joints work together to produce movement.

18. Find 3 texts in the Bible that mention bones and/or muscles. Tell about each one in your own words.

1. _____

2. _____

3. _____



Pathfinder's Name

Brain and Behavior

1. Be able to label a diagram or a model of a human brain including the following parts and tell briefly what each part does.

medulla _____

pons _____

cerebellum _____

midbrain _____

thalamus _____

hypothalamus _____

pituitary gland _____

cerebrum _____

2. What is a neuron?

Draw a picture of a typical neuron and label its parts.

Where does information enter a neuron and where does information leave from?

- ❑ 3. Explain how drugs affect the function of neurons especially at the 'synapse'.

Make a commitment never to take drugs except for medical reasons.

- ❑ 4. What is a reflex?

Perform a knee-jerk reflex test on someone. (Instructions: Gently tap someone just below the knee-cap while the person's leg is hanging over the edge of a chair.). Explain why it occurs (use the following terms in your answer: sensory neuron, motor neuron, spinal cord).

Why do doctors use this test in a physical exam?

- ❑ 5. What is a sensory neuron?

What is "adaption". Demonstrate adaption by doing the following:

- a. Rest your arm on a table and then place a small cork (or some thing very light) on your arm. Notice how it feels at that time and how it feels one minute later after not moving.
- b. Place one finger of one hand in a bowl of cool water and another finger of the other hand into a bowl of warm water. After 30 seconds, put both fingers in to a bowl of water at room temperature. How does the water at room temperature feel on each finger?

c. What spiritual lesson can be drawn from the concept of adaption?

❑ 6. How are the senses of taste and smell similar and how are they different.

Similar _____

Different _____

Draw a map of which part of the tongue responds to the following tastes. **Instructions:** Have someone dip a Q-tip into one of the following: sugar water (for sweet), lemon juice (for sour), flat tonic water (bitter) or salty water (salt), and then lightly touch different parts of your tongue. Notice which areas of the tongue taste the solution that is being tested. Rinse with pure water between each test and use a new Q-tip for each test.

Sweet

Sour

Bitter

Salt

- ❑ 7. Draw a picture of the various parts of the eye and explain why you have a blind-spot. Find your blind-spot for one eye. **Instructions:** Place a very small black dot on the center of a white piece of paper. Close one eye and stare directly ahead. Hold the paper at arms length in front of you and move the paper until the spot "disappears" (usually this is occurs when the dot is just a bit below eye level—it is important).

- ❑ 8. Describe the three basic parts of the ear and tell what each part does.

Basic Parts	Function
1. _____	_____
2. _____	_____
3. _____	_____

Explain why the following activities can be bad for your hearing:
listening to a "walkman"

putting something long in your ear

being in the front row at a loud music concert

not treating an ear infection properly

standing behind a jet at an airport

- ❑ 9. Do one or more of the following activities: (some of these activities will need to be planned with a medical/dental professional or at a local college or university—they are usually very willing to assist you)
 - a. Observe an electroencephalogram or one being performed on someone and describe what can be learned from this test.
 - b. Watch a "lie-detector" test being performed. Briefly explain how one works.
 - c. Observe an MRI or one being performed and explain what information can be learned from such a test.
 - d. Observe a neuron under a microscope.
 - e. Observe someone receiving an local or general anesthetic and explaining how an anesthetic works.
 - f. Observe a real human brain (fresh or preserved)

- ❑ 10. List at least 5 things that you can do to protect your brain from damage.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

- ❑ 11. Do one of the following:
 - a. Visit and help care for someone (minimum of 2 hrs) who has a disease of the brain and report on their special needs.

- b. Briefly describe the following disorders of the nervous system:
Alzheimer's Disease _____

Multiple Sclerosis _____

Epilepsy _____

Major Depression _____

Down Syndrome _____

Huntington's Disease _____

quadriplegic _____

paraplegic _____

12. Find at least three references from the Bible that refer to your brain and/or to decisions that you make in life.

1. _____ 3. _____

2. _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

CPR - Cardiopulmonary Resuscitation

1. Successfully complete a class sponsored by either the American Heart Association, the American Red Cross, or an equivalent under a certified instructor in order to properly learn and demonstrate one-person CPR. This must be within the past 12 months.

Date course completed: _____

2. Know and understand the location and function of the heart and lungs.

Location: _____

Function: _____

3. Define CPR and tell five conditions under which it would be used.

Definition: _____

Conditions of use:

1. _____

2. _____

3. _____

4. _____

5. _____

4. Understand Prudent Heart Living.

List five things a person can do to maintain a healthy heart.

1. _____

2. _____

3. _____

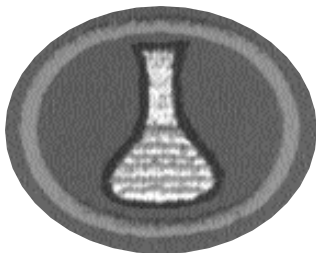
4. _____

5. _____

- ❑ 5. Develop, maintain, and keep a record of a personalized program in exercise, health, and diet habits for one month.
- ❑ 6. Learn the significance of the colors and design used on the honor token for this honor as follows:
 - a. The person needing CPR is white, signifying no circulation.
 - b. The person giving CPR is red, signifying a very alive person.
 - c. The background of purple signifies loyalty or commitment.
 - d. The border of gold speaks to the value of the human life.
 - e. A heart is formed by the head, shoulders, and arms of the person performing the CPR, signifying compassion for another individual.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Chemistry

1. Define the following terms:

Elements _____

Compounds _____

Chemical symbols _____

Solutions _____

Atoms _____

Molecules _____

Periodic table _____

Combustion _____

Acid _____

Salt _____

Proton _____

Neutron _____

Electron _____

Distillation _____

Fractional distillation _____

Filtration _____

2. What gases extinguish life, and how?

Explain the principle of one kind of chemical fire extinguisher.

3. Name two common sources of carbon monoxide.

1. _____ 2. _____

Why is it dangerous?

4. What are the states of matter?

5. Do five of the following, and explain the chemical action that takes place:

a. Try to light a sugar cube, first without and then with some ash applied to the cube, thus showing the action of a catalyst.

Chemical action: _____

- b.** Place an ice cube in a glass of water, place a four-inch (10.2 cm) string on top of the glass and ice, then solve the problem of taking the ice cube out of the water without touching it.

Chemical action: _____

- c.** With the use of water, turpentine, and soap, transfer a newspaper picture to a blank sheet of paper.

Chemical action: _____

- d.** With the use of a candle and a piece of cardboard, demonstrate visually the three parts of a candle flame.

Chemical action: _____

- e.** With a bowl of water, wooden match sticks, a lump of sugar, and small amount soap, demonstrate the action of sugar and soap on the floating match sticks.

Chemical action: _____

- f.** Place a fresh egg in fresh water and then salt water, noting the difference.

Chemical action: _____

- g.** Demonstrate that rust uses up oxygen with the use of steel wool, a pencil, a rubber band, a water glass, and a dish of water.

Chemical action: _____

- h.** Demonstrate the colors produced when the following are burned: salt, copper, sulfate, and boric acid.

Chemical action: _____

- i.** Make an invisible ink.

Chemical action: _____

- j.** Show that washing soda or sodium carbonate contains water.

Chemical action: _____



Pathfinder's Name

Digestion

- 1. Have the Nutrition Honor.
- 2. Keep a record of what and how much food you eat for two weeks. Compare your diet to that of the food pyramid.
- 3. What is digestion?

What is another name for the human digestive system?

- 4. Where does saliva come from?

What are the three functions of saliva?

- 5. Be able to identify the following parts of the tooth: enamel, dentin, pulp, gum, cementum, and periodontal membrane.

What role do the teeth play in digestion?

- 6. Be able to label a diagram or model of all the organs that help with digestion. Starting from where the food goes into the mouth to where it was expelled from the anus.

- 7. Know the difference between food bolus and chyme.

Food bolus _____

Chyme _____

8. Where does bile come from?

Where is it stored?

What does it do in the duodenum?

9. What are villi?

What makes them absorb the nutrients so quickly?

At what point are all the nutrients removed from the food/chyme?

Compare the amount of water absorbed by plain paper compared to a similar sized paper towel using an 1/8 cup (17.2 ml) of water.

	Plain Paper	Paper Towel
Water	_____	_____

10. What happens if too much water is present in the large intestine?

What happens if not enough water is present?

11. How does fiber in your diet aid in digestion?

How long should food remain in the digestive tract?

What happens if food stays in the digestive system too long?

12. Demonstrate the digestion of starch into simple sugar using the iodine test.

13. What are the six basic nutrients that are essential for life and where does the bulk of their digestion/absorption take place?

	Nutrients	Disgestion/Absorption
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

14. Know the difference between monosaccharide, disaccharide, and poly saccharide.

Monosaccharide _____

Disaccharide _____

Poly saccharide _____

What is the most important carbohydrate?

❑ 15. What are amino acids?

How many are needed to make all the proteins in the body?

What is meant by essential amino acids?

How many of them are essential?

Where can you get all the essential amino acids?

❑ 16. What is ATP?

What is it used for?

What does your body make ATP from?

What three sets of chemical reactions make ATP in your body?

1. _____
2. _____
3. _____

Why do we need to breathe oxygen?

17. Know the difference between water and fat soluble vitamins.

Water soluble _____

Fat soluble _____

What are two common vitamins that are fat soluble?

1. _____

2. _____

What are two vitamins that are water soluble?

1. _____

2. _____

18. List four (4) Bible texts that refer to digestion.

1. _____

2. _____

3. _____

4. _____

19. List five (5) E.G. White references that promote proper digestion.
Choose a variety of topics.

1. _____

2. _____

3. _____

4. _____

5. _____

Date completed _____

Instructor's Signature

Digestion
2002 Edition



Pathfinder's Name

First Aid, Basic

(Instructor for Skills Required)

If residing in the United States or another country where Red Cross instruction is given, satisfactorily pass the Red Cross Examination in Basic First Aid and receive your certificate.

In British countries pass the examination in St. John Ambulance and receive certificate for the same.

Or complete the following requirements:

1. Know the causes of shock and demonstrate its proper treatment.

Causes _____

Treatment _____

2. Know the proper steps for rescue breathing.

3. Know the proper procedures to assist a choking victim.

4. Know the proper procedures to assist a bleeding victim.

- 5. Know the pressure points and how to correctly apply pressure at these points.

- 6. Know the proper procedure to assist a victim of poisoning.

- 7. Demonstrate the proper procedure in splinting various broken bones in the body.

Areas splinted _____

- 8. Know the proper procedure to assist the burn victim.

First degree _____

Second degree _____

Third degree _____

- 9. Know the proper procedure to assist a victim of a chemical burn.

- 10. Know what situations are likely to cause carbon monoxide poisoning and the rescue and treatment techniques for such poisoning.

Causes _____

Rescue techniques _____

Treatment _____

- 11. Know the proper procedure for giving assistance to the victim of a head injury.

- 12. Know the proper procedure for giving aid to a victim of internal injuries.

- 13. Know the difference between the following and the treatment of each
Heart attack _____

Treatment _____

Stroke _____

Treatment _____

Epilepsy _____

Treatment _____

simple fainting _____

Treatment _____

14. Know how to prevent infection.

15. What is the proper treatment for a snake bite?

16. What is the proper treatment for animal bites?

17. What is the proper treatment for insect and spider bites?

18. What is the difference between heat exhaustion and heat stroke, and what is the treatment for each?
Heat exhaustion _____

Treatment _____

Heat stroke _____

Treatment _____

19. What should you do if your clothes catch fire?

20. What are the basic fire prevention principles for the home?

21. What are the basic water safety principles?

22. What are the ways to save a drowning victim without swimming?

23. What are the basic electrical safety principles?

24. How can you prevent food poisoning?

Note: The red oval on the patch designates “basic” level.

Date completed _____

Instructor’s Signature



Pathfinder's Name

First Aid, Standard

(Instructor for Skills Required)

If residing in the United States or another country in which Red Cross instruction is given, satisfactorily pass the Red Cross Examination in Standard First Aid and receive your certificate.

In British countries pass the examination in St. John Ambulance and receive certificate for the same.

Or complete the following requirements:

1. Know the basic principles for mouth-to-mouth breathing and the treatment for an obstructed airway.

Principles _____

Treatment _____

2. What is the difference between a heart attack and a stroke and the treatment for each?

Heart attack _____

Treatment _____

Stroke _____

Treatment _____

3. Know the proper procedure for assisting a bleeding victim.

- 4. Know the pressure points and how to correctly apply pressure at those points.

- 5. Know the proper method of applying a tourniquet and when to apply one.

- 6. Know the causes of shock and demonstrate its proper treatment.

- 7. Know the proper procedure for assisting a victim of poisoning.

- 8. Know the proper procedure for assisting a burn victim.

- 9. Know how to properly apply the following bandages:
 - a. Open and closed spiral
 - b. Figure-eight
 - c. Fingertip
 - d. Cravat bandage to the head

- ❑ 10. Know how to apply the following splints:
 - a. Upper arm splint
 - b. Forearm splint
 - c. Ankle splint
 - d. Kneecap splint

- ❑ 11. Know the proper treatment for the following:
 - Head injuries _____
 - _____
 - Internal injuries _____
 - _____
 - Gunshot wounds _____
 - _____
 - Injuries to the eye _____
 - _____
 - Animal and insect bites _____
 - _____
 - Fainting and epilepsy _____
 - _____
 - Effects of heat and cold _____
 - _____

- ❑ 12. Know what to do in an electrical emergency.
 - _____
 - _____
 - _____
 - _____

- ❑ 13. Know how to escape from a fire.
 - _____
 - _____
 - _____

- ❑ 14. Know how to obtain help in an emergency
 - _____
 - _____
 - _____

15. Know the proper procedure to assist a radiation-exposure victim.

16. Know the following rescue carries:

- | | | | |
|----|----------------------|----|----------------------------|
| a. | Drag by shoulder | e. | Improvised litter |
| b. | Blanket drag | f. | Three-person hammock carry |
| c. | Two-person carry | g. | Litter carry |
| d. | Carry by extremities | | |

Note: The white oval on the patch designates “standard” level.

Date completed _____

Instructor's Signature

**First Aid, Standard
2002 Edition**



Pathfinder's Name

First Aid, Advanced

If residing in the United States or any other country in which Red Cross instruction is given, pass the American Red Cross exam in Advanced First Aid and receive your certificate.

Note: The yellow oval on the patch designates “advanced” level.

Date completed _____

Instructor's Signature

Health Science
General Conference
2002 Edition



Health and Healing

- 1. Be in at least the eighth grade.
- 2. Through the Bible and/or Spirit of Prophecy learn how Jesus healed the sick and the procedure for church elders to use to anoint the sick and ask God for healing. Write a 250-word report or give a two-minute oral report on what you learned.
- 3. What is continuing education as related to health careers?

- 4. Interview at least two people who work in a medical health career. One of the two must be someone other than a doctor or nurse, such as someone working in dentistry, physical therapy, respiratory therapy, radiology, nutrition, etc.

People interviewed

- 1. _____
- 2. _____

In your interviews ask the following questions:

- a. Why did you choose your profession?
- b. What education is necessary to enter your profession?
- c. After education what amount of time does it take to become certified or proficient in your field?
- d. What part of your job do you like the best? The least?
- e. What days of the week and hours per day do you work at your job?
- f. What advancement is available in your field?
- g. What course of study in college would complement your chosen profession?
- h. List local schools that offer training in your profession?

- ❑ 5. Do one of the following:
- a. Be a candy stripper or a page in a hospital or medical facility.
 - b. Visit a medical or dental office and do the following:
 - (1) Observe the areas of operation, such as the business office, laboratory, examining rooms, x-ray room, etc.
 - (2) Be introduced to the equipment used in the office.
 - (3) Learn the steps of an office visit from when a patient comes into the waiting room until the time he leaves the office.
 - (4) Learn how the doctor does an examination from the taking of the patient's history to the diagnosis.
 - c. Go on a visit with a home nurse and do the following:
 - (1) Learn the steps of a home visit from when the nurse finds out about the patient to when the nurse reports to a doctor.
 - (2) Observe the nurse taking the vital signs.
 - (3) Observe the nurse giving instructions and medication.
 - d. Visit an outpatient department of a hospital, such as physical therapy, x-ray, laboratory, etc. Do the following:
 - (1) Observe the areas of operation in the department.
 - (2) (Be introduced to the equipment used in the department and how it works.
 - (3) Learn the steps a patient takes when visiting the department.
 - (4) How many people does it take to staff the department?
 - (5) Does the department operate at night?

Date completed _____

Instructor's Signature



Pathfinder's Name

Home Nursing

- 1. Have the First Aid Honor.
- 2. What foods are included in the following diets
Liquid _____
Soft _____
Light _____
Full _____
- 3. Know the symptoms of a fever.

Know how to take person's temperature.

Know how to bring a high temperature down.

- 4. Know what is a normal rate for
pulse _____
respiration _____
temperature _____
Practice taking the pulse rate, respiration rate, and temperature of a friend or classmate.
Friend/Classmate _____
Pulse _____ Respiration _____ Temperature _____
- 5. What is a communicable disease?

How is it transmitted?

What precautions should be followed to guard against communicable diseases?

List safety measures to be observed when caring for a person with a communicable disease in the home.

6. What symptoms tell you that a person is physically ill?

7. Know how to help take care of a newborn and an aged person in your home.

Newborn _____

Ways to help _____

Aged Person _____

Ways to help _____

8. Know when and how to wash your hands when caring for a sick person.

When _____

How _____

- 9. Know how to make a bedridden patient comfortable in bed.

- 10. Show how to feed a helpless patient in bed.

- 11. Show how to give liquid medicine and tablets, pills, or capsules to children and adults.

Know how to properly apply eye drops.

- 12. Demonstrate the method of giving fomentations and foot baths.

Explain the value of their use and tell the conditions under which such treatments should be given.

Value _____

Conditions _____

- 13. Demonstrate the application of a heating compress and the use of heat and cold for the treatment of inflammation and bruises.

- 14. Explain how the following natural remedies help in preventing disease:
(Note how the first letter of each item spells NEW START).

Nutrition

Exercise _____

Water _____

Sunshine _____

Temperance _____

Air _____

Rest _____

Trust in God _____

Date completed _____

Instructor's Signature



_____ Pathfinder's Name

Optics

1. Define and/or draw a diagram of the following:

Focal length _____

Positive lens _____

Negative lens _____

Two kinds of distortion _____

Longitudinal color _____

Lateral color _____

Spherical aberration _____

Achromatic lens _____

Refraction of light _____

- 2. Explain how light behaves when it strikes or traverses water, oil, feldspar, and a mirror.

Water _____

Oil _____

Feldspar _____

Mirror _____

- 3. Name and draw diagrams of three kinds of positive lenses and three kinds of negative lenses.

Positive

1. _____ 2. _____ 3. _____

Negative

1. _____ 2. _____ 3. _____

- 4. What should be the minimum distance of light source from the lens when testing for focal length?

- 5. Find the focal length of at least four lenses, one being a negative lens.

1. _____ 3. _____

2. _____ 4. _____

- 6. Explain by diagram why an image from a positive lens makes an image reversed and inverted.

7. Show with diagrams how a prism works. State the angles at which the colors appear and disappear.

8. Show and demonstrate what happens when light strikes one-way glass.

9. Construct one optical instrument using mirrors or lenses, such as a periscope, a slide or opaque projector, or a simple telescope.

10. Explain what is meant by the term 6x35 and 7x50 as applied to binoculars.

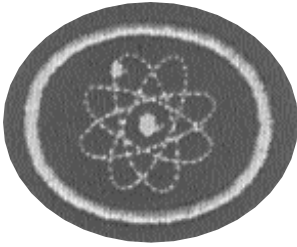
11. Define the term "f/stop" as used in connection with cameras.

What does it mean when a lens is fast or slow?

Is an f/8.5 lens faster or slower than an f/8 lens?

Date completed _____

Instructor's Signature



Pathfinder's Name

Physics

1. Define the following:

Physics _____

Mass _____

Work _____

Force _____

Power _____

Potential energy _____

Kinetic energy _____

Weight _____

Matter _____

Inertia _____

Friction _____

Wave _____

Center of gravity _____

Exponential notation _____

Absolute zero _____

Fulcrum _____

2. What is the scientific method? How can the scientific method be used to study the Bible?

3. What is a controlled experiment?

4. Explain the terms in Albert Einstein's $E=mc^2$ equation.

5. What units of measure for mass, length, and time are used where you live?
Mass _____
Length _____
Time _____

6. What units of measure are used for time prophecy in the Bible?

What is the chapter and verse where they can be found?

- ❑ 7. List Newton's three laws of motion.
 1. _____
 2. _____
 3. _____
- ❑ 8. Using a table cloth and several heavy books, demonstrate Newton's first law of motion.
- ❑ 9. Using an air-filled balloon, demonstrate Newton's third law of motion.
- ❑ 10. Demonstrate Galileo's falling body experiment by dropping two plastic beverage bottles (one full of water, the other half full) at the same time from a height of seven feet. Record the results and draw a spiritual application from this experiment.

Results _____

- ❑ 11. Demonstrate the mechanical advantage of levers by pulling a large nail, driven deeply into a board, using only a hammer. Pull a second nail using a hammer and a small block of wood, located near the nail, under the head of the hammer. Note the difference in force required to pull the nail with different positions on the hammer on the block (fulcrum) and draw a spiritual application from this experiment.

Force required _____

 Position _____



Pathfinder's Name

Red Alert

1. Tell what you should do to prevent injury and/or possible loss of life in the following situations:

A fire in your house _____

A neighbor's house _____

A public building _____

If you are stranded in a car in a blizzard or desert _____

Motor vehicle accident _____

Earthquake _____

Flood _____

Tornado _____

Hurricane _____

Thunderstorm _____

Atomic emergency _____

Rock or snow avalanche _____

Your boat or canoe capsizes in open water _____

2. When telephoning for help in an emergency situation, what essential information should be given and who should hang the telephone up last?

3. Demonstrate what emergency first aid measures you should take in the following situations?
a. Someone's clothes catch on fire
b. A severely bleeding wound
c. Someone is choking
d. Someone swallows poison

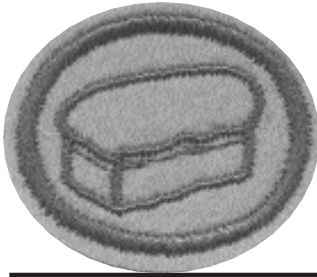
4. Do the following:
a. Draw an escape route for your family in case of fire in your home when your normal exits are blocked.
b. Practice with your family a home fire drill.
Date of drill _____
c. Discuss with your examiner the procedures for safely getting people out of your church and school in case of a fire.
Consideration should be given as to how to prevent panic.
Panic prevention _____

5. What should you and your parents do to prevent abduction of children in your family?

What should you do if you are abducted?

Household Arts Index

Baking	
Basic Sewing	
Cooking	
Cooking, Advanced	
Cultural Food Preparation	South Pacific Div/Island Ed.
Dressmaking	
Dressmaking, Advanced	
Food - Canning	
Food - Drying	
Food - Freezing	
Housekeeping	
Laundering	
Mat Making	South Pacific Div/Island Ed.
Nutrition	
Nutrition, Advanced	
Quilting	
Tailoring	
Tapa Cloth	South Pacific Div/Island Ed.



Pathfinder's Name

Baking

1. Explain the difference in food value between whole wheat flour and white flour.

Whole wheat flour _____

White flour _____

2. Describe the effects of yeast in bread making.

3. Give one Old Testament and one New Testament incident where leavening is mentioned.

Old Testament _____

New Testamant _____

4. Prepare whole grain bread (can be wheat, rye, oatmeal, etc.).

Type of bread _____

5. Prepare two of the following:

- a. Yeast biscuits
- b. Unleavened bread
- c. Bread sticks
- d. Bagels
- e. Vegetable bread

6. Explain why the use of baking powder and soda should be avoided and why the mixture of milk, sugar, and eggs is harmful to health.

Baking powder and soda _____

Milk, sugar and eggs _____

7. How do you test a cake for being done?

How do you keep a cake from "falling"?

8. Prepare two of the following:
- a. Cake from basic ingredients (any flavor)
 - b. Cake from a mix (any flavor)
 - c. Fruit or nut cake or loaf cake
 - d. Sponge cake
9. Make one pie in each of the following categories:
- a. Baked, any fruit, including lemon
 - b. Unbaked (baked pie shell only), fresh fruit, gelatin, etc.
10. Make and bake one recipe of cookies.

Type of cookies _____

Make one recipe of refrigerator cookies.

Type of cookies _____

It is preferable to use wholesome ingredients such as fruit, oatmeal, nuts, etc.

11. Prepare recipe file for all of the items required above and any others desired. See how many recipes you can find using fruit without large amounts of sugar.



Pathfinder's Name

Basic Sewing

- 1. Describe the proper use of the following:
 - Thimble _____
 - Tape measure _____
 - Scissors and shears _____
 - Pinking shears _____
 - Needles of various sizes and types _____
 - _____
 - _____

- 2. Become acquainted with the sewing machine in your home or school. Identify:
 - a. Balance wheel
 - b. Thread take-up
 - c. Presser foot
 - d. Presser foot lifter
 - e. Needle
 - f. Feed dogs
 - g. Bobbin
 - h. Control
 - i. Backspace lever

- 3. Demonstrate how to properly thread and run the machine.

- 4. Put a hem in one of the following items showing neat and even stitches.
 - a. Towel
 - b. Apron
 - c. Flannel baby blanket
 - d. Flannel lap blanketItem hemmed _____

- 5. Demonstrate your ability to properly sew on buttons and snaps.

- 6. Tell what is meant by selvage, bias, and grain of fabric.

Selvage _____

Bias _____

Grain of fabric _____

- 7. Make a laundry bag for camping, or a similar simple item.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Cooking

1. Know how to properly operate the kind of stove you have in your home. Know how to put out an oil or grease fire on your stove.

Know how to prevent such a fire.

Know safety precautions while cooking, including consideration of small children.

2. Know how to properly use
- a. Measuring spoons
 - b. Measuring cups
 - c. An electric mixer
 - d. A blender
 - e. Food processor.

3. What is meant by

boiling _____

broiling _____

frying _____

baking _____

simmering _____

waterless cooking _____

microwave cooking _____

Which are the most healthful ways of preparing common foods?

Which are the most unhealthful ways?

- 4. Demonstrate your ability to properly prepare two different kinds of hot cereal, a healthful hot drink, and cook eggs in two different ways other than frying.

Methods

Hot cereal	1. _____	2. _____
Hot drink	1. _____	2. _____
Eggs	1. _____	2. _____

- 5. Prepare potatoes healthfully by two different methods.
1. _____ 2. _____

- 6. Cook three other vegetables in the most healthful way.

Vegetables	Method cooked
1. _____	_____
2. _____	_____
3. _____	_____

- 7. Prepare a simple salad.
Why do we need fresh salads in our diet?

- 8. Know the food pyramid guide.

Why is it important that we follow the food pyramid guide in our diet every day?

Make a chart for one week of the foods you eat to see if you are following the food pyramid guide. (Complete Meal Chart)

- 9. Set the table properly for your family for an evening meal.

Serve a balanced meal that you have planned and prepared as much as possible by yourself. Include main dish, vegetable, and salad.

Main dish _____

Vegetable _____

Salad _____

Additional items _____

- 10. Follow a recipe correctly in making a vegetarian entree or a vegetable casserole.

Recipe _____

- 11. Start a recipe file of your own. Put into it 10 recipes of dishes you have personally prepared from entrees, vegetables, salads, and beverages.

Cooking—Meal Chart

Make a chart for one week of the foods you eat to see if you are following the food pyramid guidelines

	MORNING	AFTERNOON	EVENING
Day 1 <u>day of the week</u>			
Day 2 <u>day of the week</u>			
Day 3 <u>day of the week</u>			
Day 4 <u>day of the week</u>			
Day 5 <u>day of the week</u>			
Day 6 <u>day of the week</u>			
Day 7 <u>day of the week</u>			

Cooking, Advanced

- 1. Have the Cooking Honor.
- 2. How many cups make a quart? (How many mls to make a liter?)

How many table spoons to a cup?

How many teaspoons to a table spoon?

- 3. Prepare two main casserole dishes using macaroni, noodles, beans, or rice.

Macaroni

1. _____ 2. _____

Noodles

1. _____ 2. _____

Beans

1. _____ 2. _____

Rice

1. _____ 2. _____

- 4. Prepare two different vegetable casserole dishes.

1. _____ 2. _____

- 5. Prepare two kinds of salad.

1. _____ 2. _____

How are salads kept crisp?

- 6. Know the difference in food value between whole milk, lowfat milk, and non-dairy milk.

Whole milk _____

Lowfat milk _____

Non-dairy milk _____

- 7. Prepare a balanced breakfast using the food pyramid guide.

Menu _____

- 8. Prepare a vegetarian entree dish.

Entree _____

- 9. Plan menus for one week, choosing at least three dishes in which left overs may be used. (Complete Meal Chart)

Leftovers

1. _____ 2. _____

3. _____

- 10. Prepare a balanced meal using a vegetarian entree, a vegetable case- role, and a salad.

Vegetarian entree _____

Vegetable caserole _____

Salad _____

Additional items _____

- 11. Know several reasons why vinegar is unhealthful.

12. What does caffeine do to the body?

List five foods that contain caffeine.

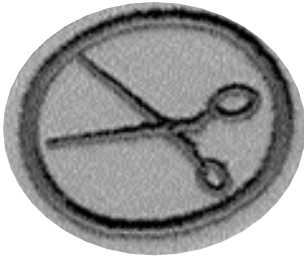
1. _____
2. _____
3. _____
4. _____
5. _____

13. Have 25 recipes of personally-prepared dishes, not more than five of which are candies or desserts.

Cooking, Advanced—Meal Chart

Plan menus for one week, choosing at least three dishes in which leftovers may be used.

	MORNING	AFTERNOON	EVENING
Day 1 <u>day of the week</u>			
Day 2 <u>day of the week</u>			
Day 3 <u>day of the week</u>			
Day 4 <u>day of the week</u>			
Day 5 <u>day of the week</u>			
Day 6 <u>day of the week</u>			
Day 7 <u>day of the week</u>			



Pathfinder's Name

Dressmaking

- 1. Have and review the Basic Sewing Honor.
- 2. Have a practical sewing box for your sewing supplies. Include in it a pin cushion, tape measure, pins, needles, thread, scissors, seam gauge and seam ripper.
- 3. Know how and when to:
 - Baste _____
 - Overcast _____
 - Zigzag _____
 - Blind hem _____
- 4. Identify (a) 5 natural fabrics such as
 - a. cotton
 - b. linen
 - c. wool
 - d. silk

(b) synthetic fabrics such as

 - a. rayon
 - b. nylon
 - c. dacron
 - d. polyester.
- 5. Show and demonstrate how to straighten fabric before use.
- 6. Choose a pattern for an item such as a shirt, blouse, skirt or shop apron.

Pattern _____

Properly lay your pattern on the material, cut it out, and sew your item to completion.

Date completed _____

Instructor's Signature _____

Dressmaking, Advanced

- 1. Have the Dressmaking Honor.
- 2. Do the following:
 - a. sew a seam with finished edges
 - b. make darts
 - c. gather
 - d. bind
 - e. topstitch
 - f. make a French seam.
- 3. Make a neat buttonhole.
- 4. Demonstrate on another person how to measure for
 - a. length of skirt or pant
 - b. length of sleeve
 - c. length from neck to waistline.
- 5. Make a blouse or shirt with set-in sleeve and a collar, and explain how you would adjust the shoulders for persons of different build.
- 6. Explain how to make at least four of the following alterations or modifications in patterns:
 - a. shorten/lengthen waist
 - b. shorten/lengthen sleeve
 - c. waist size
 - d. shorten/lengthen skirt or pants
 - e. shorten/lengthen blouse.
- 7. Make a pair of pants or shorts that fit properly.
- 8. Make a skirt that fits properly.
- 9. Select from pictures or draw an outfit for yourself that shows proper color harmony and is complementary to your figure.



Pathfinder's Name

Food - Canning

1. Define the following:

Botulism _____

Steam pressure canning _____

Cold pack _____

Sterilize _____

Boiling water bath _____

Steam canning _____

Jelly _____

Scald _____

Open kettle canning _____

Jam _____

Pectin _____

Hot pack _____

Pickles _____

Marmalade _____

2. List the equipment used in the following methods of canning:

Pressure _____

Boiling water bath _____

Steam _____

Open kettle _____

3. Give directions for
sterilizing _____

filling _____

sealing _____

testing seals on jars _____

4. When should food be steam pressure processed?

5. List the kinds of vegetables and fruits that are excellent for canning as opposed to freezing or drying.

Vegetables	Fruits
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

6. Can the following items:

- a. One fruit juice using the open kettle method

Juice _____

- b. Two kinds of fruit using the boiling water bath method, one by hot packing and one by cold packing

Boiling Water bath 1. _____
2. _____

Hot packing 1. _____

Cold packing 1. _____

- c. Two kinds of vegetables using the pressure canning method, one by hot packing and one by cold packing

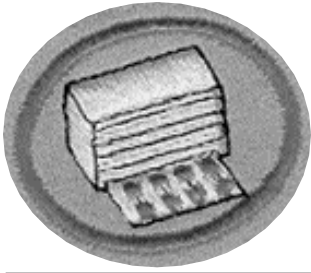
Pressure canning method 1. _____
2. _____

Hot packing 1. _____

Cold packing 1. _____

- d. One jelly or jam

Jelly or jam _____



Pathfinder's Name

Food - Drying

- 1. List at least three different ways to dry foods.
 - 1. _____
 - 2. _____
 - 3. _____
- 2. Why and how do you sulphur fruits?
Why _____

How _____

- 3. How is dried fruit stored and protected from insects?

- 4. How are dried foods reconstituted?

- 5. What is important in selecting fruit to be used in making fruit leather?

- 6. How are dried nuts stored?

- 7. Dry the following and provide samples for testing:
 - a. Bread. Make crumbs and use in a recipe for sampling.
 - b. Fruit leather
 - c. Vegetable leather
 - d. Fruit slices
 - e. Vegetable slices (such as carrots) or pieces (such as peas)
 - f. Vegetarian jerky
 - g. Parsley or some other herb

- 8. Reconstitute a vegetable and cook for sampling.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Food - Freezing

1. Define the following terms:

Blanching _____

Quick freeze _____

Freezer burn _____

2. What kinds of containers can be used for freezing foods?

3. What are the essential things to be considered when selecting vegetables or fruits for freezing?

4. How do you thaw frozen vegetables for the table?

How do you thaw frozen fruits for the table?

5. Freeze two vegetables (corn and another of your choice), then prepare and serve for sampling.

1st Vegetable _____

2nd Vegetable _____

6. Quick freeze a vegetable for easy pouring.

Vegetable _____

7. Why is salt not put in vegetables to be frozen?

8. Freeze some peaches in light syrup and also some in orange or pineapple juice.

What is the reason for using ascorbic acid in the syrup and not in the fruit juice?

Why is ascorbic acid used in freezing peaches?

9. Freeze one type of berry without added sweeteners.

Berry _____

10. Make one kind of freezer jam.

Freezer jam _____



Pathfinder's Name

Housekeeping

- 1. Have the Laundering Honor.
- 2. List items used in keeping a house clean.

- 3. Describe the best way to keep stoves, microwave ovens, and refrigerators clean.

- 4. Under what conditions do germs and pests thrive?

Give ways of cleaning each of the following:

basement _____

closets _____

cupboards _____

sinks _____

floors _____

toilets _____

- 5. State the proper way to prepare dishes for washing, either in the sink or dishwasher.

State the order in which silver, glass, table, and kitchen dishes should be washed.

1st _____ **2nd** _____

3rd _____ **4th** _____

- 6. How should the following be cleaned

rugs _____

carpets _____

pillows _____

upholstered furniture _____

papered walls _____

painted walls _____

floors _____

windows _____

- 7. How is trash disposed of in your community?

- 8. What precautions should be taken in cleaning out a fireplace?

- 9. What is meant by keeping a home "baby safe"?

- 10. Plan and do the work in a house for one week.



Pathfinder's Name

Laundering

1. Why is it important to read the labels in garments before laundering them?

2. What is the proper way to prepare clothes for washing?

3. What types of clothes should be washed in hot, warm, and cold water?

Hot _____

Warm _____

Cold _____

4. What precaution should be used when using chlorine bleach?

What are the advantages of powdered oxygen bleach?

Why should chlorine bleach and ammonia never be mixed?

5. What precautions should be taken when using liquid fabric softeners?

- ❑ 6. Know how to remove the following stains:

blood _____

chewing gum _____

crayons _____

grass _____

grease _____

fruit _____

ink _____

rust _____

grape juice _____

Why must stains be removed before laundering?

- ❑ 7. How are woolen and wool like garments laundered?

- ❑ 8. Why is it important to remove garments from a dryer immediately when the cycle is complete?

- 9. What points are to be considered in selecting a washing machine, dryer and iron?

Washing machine _____

Dryer _____

Iron _____

How should these items be cared for?

- 10. Know what type of materials should be dried only on the lowest heat setting of a dryer.

- 11. Show a blouse or shirt that you have properly ironed.

- 12. Properly launder and fold clothes for your family for one week.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Nutrition

1. Describe the food pyramid guide.

List the number of servings required from each group per day.

Food Pyramid	Number of servings
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____

Why is it important to eat a balanced diet?

2. Explain the difference between the following:

Lacto-ovo vegetarian _____

Ovo vegetarian _____

Vegan vegetarian _____

3. Plan a two-day menu, containing a balanced lacto-ovo vegetarian diet utilizing the food pyramid guide. (Complete chart)

4. What is another name for

Vitamin B1 _____

Vitamin B2 _____

5. List at least three significant food sources of the following nutrients:

	Source 1	Source 2	Source 3
Vitamin C	_____	_____	_____
Vitamin A	_____	_____	_____
Vitamin B1	_____	_____	_____
Vitamin B2	_____	_____	_____
Iron	_____	_____	_____
Calcium	_____	_____	_____

6. Why is it important to drink plenty of water every day?

How much water should you drink every day?

7. Name three common diseases that can be controlled by diet.

1. _____ 3. _____

2. _____

8. What is the difference between whole wheat flour and white flour.

Whole wheat flour _____

White flour _____

Which one has the higher nutritive value?

9. What does RDA stand for?

What does it mean?

- ❑ 10. Why is it important not to take excessive amounts of some vitamins and minerals?

Nutrition Chart

Plan a two day menu containing a balanced lacto-ovo vegetarian diet from the food pyramid

	BREAKFAST	LUNCH	DINNER
Day 1			
Day 2			

Nutrition, Advanced

- 1. Have the Nutrition Honor.
- 2. Read a book about Nutrition.
- 3. Keep a food diary on yourself for one week. (See chart)
- 4. Calculate the total nutrients of the following in your diet each day: (See chart)
 - a. Calories
 - b. Protein
 - c. Iron
 - d. Calcium
 - e. Vitamin A
 - f. Thiamine
 - g. Riboflavin
 - h. Niacin
 - i. Vitamin C or ascorbic acid
- 5. How do the number of nutrients in your diet compare with the Recommended Daily Allowance chart? (See chart)
- 6. Explain why a high fiber diet is important, and tell how this can be obtained.

- 7. Name three diseases due to malnutrition, and describe the symptoms of each.

Diseases	Symptoms
1. _____	_____
2. _____	_____
3. _____	_____

8. What are the symptoms of vitamin B12 deficiency?

9. What advice would you give a person who decided to be a total vegetarian?

10. What is the difference between saturated and unsaturated fats?

Saturated fats _____

Unsaturated fats _____

Which is the most healthful, and why?

Why _____

11. Why is it advisable to use less sugar in the diet?

List several ways in which this may be accomplished.

12. What are amino acids?

How many are needed to make all the proteins in the body?

What is meant by essential amino acids?

How many of them are essential?

Where can you get all the essential amino acids?

13. Know the difference between water and fat soluble vitamins.

Water soluble vitamins _____

Fat soluble vitamins _____

What are two common vitamins that are fat soluble?

1. _____ 2. _____

What are two vitamins that are water soluble?

1. _____ 2. _____

14. Using the book *Counsels on Diet and Foods* by Ellen G. White, write a paragraph on the benefits of a lacto-ovo vegetarian diet.

Nutrition, Advanced Chart

Do the following:

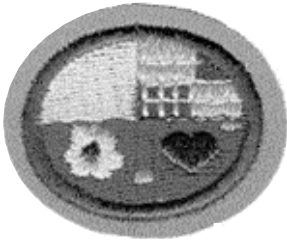
1. Keep a food diary for one week on yourself.
2. Calculate the total nutrients each day
3. Compare the nutrients in your diet with the RDA.

	MORNING	NOON	EVENING	Nutrient Totals		RDA
Day 1	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C		Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	
Day 2	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C		Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	
Day 3	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C		Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	
Day 4	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C		Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	

Nutrition, Advanced Chart (cont.)

- Do the following:
1. Keep a food diary for one week on yourself.
 2. Calculate the total nutrients each day
 3. Compare the nutrients in your diet with the RDA.

	MORNING	NOON	EVENING	Nutrient Totals		RDA
Day 5	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C		Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	
Day 6	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C		Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	
Day 7	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C		Calories Protein Iron Calcium Vitamin A Thiamin Riboflavin Niacin Vitamin C	



Pathfinder's Name

Quilting

1. What is a quilt?
- _____
- How is it used?
- _____
2. Who introduced quilts to North America?
- _____
3. What are three main fibers used in the interlining (middle layer) of a quilt?
1. _____ 3. _____
2. _____
4. What are two common types of quilts?
1. _____
2. _____
- What is a crazy quilt?
- _____
5. What is the difference between yarn tying and quilting?
- Yarn tying _____
- Quilting _____
6. What are the steps in making a quilt?
- _____
- _____
7. Construct and finish a quilt, either as an individual or group project.
8. Develop a file of at least six quilt patterns, including two patchwork and one on a patriotic theme.

Date completed _____

Instructor's Signature _____



Pathfinder's Name _____

Tailoring

1. Identify the following materials:
- | | |
|-----------------|--------------------|
| a. Wool | f. Artificial silk |
| b. Worsted wool | g. Rayon |
| c. Cotton | h. Polyester |
| d. Linen | i. Synthetic wool |
| e. Silk | |
2. Identify three of the following weaves:
- | | |
|-----------|----------------|
| a. Plain | d. Twill |
| b. Basket | e. Herringbone |
| c. Rib | f. Pile |
3. How are the following used?
- Interlining _____

- Tailor tacks _____

- Tailor canvas or other interfacing _____

- Pad stitching _____

- Iron-on interfacing _____

4. Tell the points to be considered when making a garment fit properly and look tailored.
- _____

5. Be familiar with the following pressing equipment:
- | | |
|-----------------|-------------------|
| a. Sleeve board | d. Tailor's ham |
| b. Press mitt | e. Tailor's board |
| c. Seam roll | f. Needle board |

Use at least two of these in pressing.

- 6. Know at least two methods for making bound buttonholes.

1. _____ 2. _____

Make a bound buttonhole using one of these methods.

- 7. Make a slit pocket with a welt or a bound pocket.

- 8. Demonstrate your skills in tailoring by making a man's or woman's suit that fits properly.

Date completed _____

Instructor's Signature _____

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Pathfinder's Name

Amphibians

1. What are the characteristics of amphibians?

2. Name the two main orders of amphibia and tell how to distinguish between them.

1. _____ 2. _____

3. Distinguish between toads and frogs.

Toads _____

Frogs _____

4. How do amphibians protect themselves?

5. Make a list of amphibians that should be found in your locality.

Identify five and tell where you found them. OR Collect pictures or sketch five different amphibians which you can identify and tell where they are found.

Type of Frog

Location

1. _____

2. _____

3. _____

4. _____
5. _____

6. Describe the life history of some amphibian.

7. Explain the economic value of amphibians.

8. Where do toads spend the winter or dry season?

9. Identify two species of frogs by their sound or imitate the sounds of two different species of frogs.

10. How do frogs and toads sing?

What makes the noise so loud?

11. Do one of the following:

a. Observe a toad in your yard or neighborhood to find out.

(1) Where and when it sleeps _____

(2) When it leaves its home for food _____

(3) How fast it can travel _____

(4) How far it can jump _____

and as many other interesting things as you can find out about it, and write an essay covering the details requested in the first section of this question.

b. Hatch some amphibian eggs and watch them through their growth cycle and write an essay covering the details.

Date hatched _____

Amphibians, Advanced

- 1. Have the Amphibians Honor

Note: Must have completed all requirements for the Amphibians Honor prior to working on this next level.

- 2. Design and carry out a study project based on natural or captive observation of a selected amphibian(s) and write a paper on the conclusions arrived at during the study. The parameters of the study should involve a minimum of 25 hours of actual observation time and no more than a maximum total duration of one season. Intentional harm/death of the study target is not permitted.

Note: Most amphibian species have had very little research carried out on them. It is a field wide open for study of even some of the simplest elements. For example very little data exists on the seasonal activities of frogs and the climatic factors that influence them. When does chorusing begin and stop, when does it reach its highest volume, what are the atmospheric conditions and variations associated with these. What are the dates for egg laying, hatching, transformation. What are the growth rates, age of sexual maturity, average and maximum longevity, average duration of breeding behavior, courtship behavior, rate of dispersal, location of brumation or estivation sites. Little is known about homing ability, territorial maintenance, interaction during breeding and non-breeding times and many other issues. It is indeed a field wide open to the curious and fascinated.



Pathfinder's Name

Animal Tracking

1. Know ten kinds of tracks, including two kinds of bird tracks.
- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 1. _____ | 9. _____ |
| 2. _____ | 10. _____ |
- Make plaster casts of five.
2. Name at least three things that tracks tell us.
1. _____
 2. _____
 3. _____
3. Trail some animal tracks, identify the animal if possible, and tell whether it was running or walking. Measure between the tracks of one animal when running and walking. (See Chart #1)
4. Maintain a tracking station for at least three days (See Chart #2)
- a. Select a flat open space in some quiet place near your camp or home.
 - b. Smooth out ground, mud, sand, etc.
 - c. Place food out for wildlife.
 - d. Check each day for tracks and replenish food when necessary.
5. Name two animals for each tracking group.
- Flatfoots
- | | |
|----------|----------|
| 1. _____ | 2. _____ |
|----------|----------|
- Toe walkers
- | | |
|----------|----------|
| 1. _____ | 2. _____ |
|----------|----------|
- Toenail walkers
- | | |
|----------|----------|
| 1. _____ | 2. _____ |
|----------|----------|

Bounders or long hindleggers

1. _____ 2. _____

6. Name four signs of the presence of mammals.

1. _____

2. _____

3. _____

4. _____

7. Distinguish between rabbit and squirrel tracks, and between dog and cat family tracks.

Rabbit/Squirrel Tracks _____

Dog/Cat Tracks _____

8. Name two groups of animals (mammals, birds, insects, etc.) that leave tracks or scent trails that another of their kind can follow.

1. _____ 2. _____

9. Name two birds for each of the following type of tracks:

Hopping

1. _____ 2. _____

Walking

1. _____ 2. _____

10. Besides tracks, give two other signs of the presence of birds.

1. _____

2. _____

11. Name two birds identified by their flying patterns.

1. _____

2. _____

- ❑ 12. In your area, observe tracks or trail of one or more of the following:
- | | | | |
|----|--------------|----|-----------|
| a. | Toad or frog | d. | Mollusk |
| b. | Snake | e. | Earthworm |
| c. | Turtle | f. | Mole |

Animal Observed _____

Findings _____

Date completed _____

Instructor's Signature _____

Animal Tracking Chart #1

Trail some animal tracks, identify the animal if possible, and tell whether it was running or walking. Measure between the tracks of one animal when running and walking

Animal _____

Walking or running _____

Distance between tracks _____

Animal _____

Walking or running _____

Distance between tracks _____

Animal _____

Walking or running _____

Distance between tracks _____

Animal _____

Walking or running _____

Distance between tracks _____

Animal Tracking Chart #2

Maintain a tracking station for at least three days

Area chosen _____

Types of food placed _____

Notes

Day 1 _____

Day 2 _____

Day 3 _____

Check each day for tracks and replenish food when necessary

Animal Tracking, Advanced

- 1. Have the Animal Tracking Honor.
- 2. What is the difference between positive and negative casts of animal tracks?
Positive casts _____

Negative casts _____

- 3. Make at least one positive cast from a negative cast or rubber mold.
Positive Cast _____
- 4. What is scatology and why is it important in the study of animals?
Scatology _____
Why _____

- 5. Find at least one trace of an animal other than its tracks. Through careful observation and/or analysis determine as many conclusions as possible from the evidence.
Trace of animal _____
Conclusions _____

- 6. With a partner set up a track and trail course covering at least one mile (1.6 km) which will include at least four change-of-directions utilizing traditional native signs and have at least two other persons successfully follow the route. Successfully follow a one mile (1.6 km) route set by someone else.



Pathfinder's Name

Bird Pets

- 1. Keep one or a pair of birds for at least six months.
- 2. Show you have completed one of the following:
 - a. If you have a cage bird, keep a record of its care for at least one month. Include food habits, water needs, cage cleaning, etc. (See Chart #1)
 - b. If you do not have a cage bird now but completed requirement #1 in the past, take care of some one else's bird for at least one week while they are on vacation, etc., and maintain a record of the required care. (See Chart #2)

- 3. Canaries

Give the names of four varieties of canaries.

1. _____ 3. _____

2. _____ 4. _____

Give a brief history of the origin and development of canaries.

Name and distinguish five seeds used in canary feeding.

1. _____ 4. _____

2. _____ 5. _____

3. _____

Describe briefly the general care of canaries.

4. Parakeets or love birds

To what country are parakeets or love birds native?

Describe briefly their habits of feeding, nesting, and general behavior.

5. Pigeons

Name and identify six varieties of pigeons.

1. _____ 4. _____
2. _____ 5. _____
3. _____ 6. _____

Describe their kind of food and general management.

6. What are the laws in your state or country regarding the capture, breeding, role and/or export of cage birds?

Be sure you are abiding by them while fulfilling the requirements of this Honor.

Bird Pets Chart #1

If you have a cage bird, keep a record of its care for at least one month.
Include food habits, water needs, cage cleaning, etc.

Day 1	Day 8	Day 15	Day 22	Day 29
Day 2	Day 9	Day 16	Day 23	Day 30
Day 3	Day 10	Day 17	Day 24	Additional Notes:
Day 4	Day 11	Day 18	Day 25	
Day 5	Day 12	Day 19	Day 26	
Day 6	Day 13	Day 20	Day 27	
Day 7	Day 14	Day 21	Day 28	

Bird Pets Chart #2

If you do not have a cage bird now but completed requirement #1 in the past, take care of some one else's bird for at least one week while they are on vacation, etc., and maintain a record of the required care.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Additional Notes:						



Pathfinder's Name

Birds

1. Give two characteristics which set birds apart from all other creatures.
1. _____
 2. _____

2. Name three flightless birds, tell what their diet consists of, and name the country or continent in which each one lives.

	Bird	Diet	Country/Continent
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

3. Give the day of the week when birds were created.

Find in the Bible the names of five birds and be able to name them from memory.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | |

4. Write or give orally three ways in which God's love and purpose is shown in the creation of birds.

1. _____
2. _____
3. _____

- ❑ 5. Make a list of thirty species of wild birds, including birds from at least five different orders, that you personally have observed and positively identified by sight out of doors.

1. _____	11. _____	21. _____
2. _____	12. _____	22. _____
3. _____	13. _____	23. _____
4. _____	14. _____	24. _____
5. _____	15. _____	25. _____
6. _____	16. _____	26. _____
7. _____	17. _____	27. _____
8. _____	18. _____	28. _____
9. _____	19. _____	29. _____
10. _____	20. _____	30. _____

- ❑ 6. Make a list of five species of wild birds that you personally have positively identified by sound out of doors.

1. _____	3. _____	5. _____
2. _____	4. _____	

- ❑ 7. Do one of the following:
 - a. Set up a feeding station and report on the bird visitors observed for a period of seven days.
 - b. Find a bird's nest, during the nesting season, identify the species of bird that built it, describe the nest in detail, observe the nest for five days, and report what happened at the nest on each of the days.

c. In the Western Hemisphere: Maintain a hummingbird feeder for 2 months.

(1) What does man-made nectar consist of?

(2) Why shouldn't you use food coloring or honey?

(3) When should the feeder fluid be changed?

(4) How should the feeder be cared for?

d. In other areas of the world: Select at least three different habitats in your area and make comparative bird lists of them indicating the differences in birds expected and found.

Birds, Advanced

1. Have the Birds Honor.
2. Know the laws protecting birds in your state, province, or country.

3. Describe a bird accurately by using standard names for each part of its body.

4. Find answers to either a. OR b.
 - a. In what ways are the feet, legs, and beak of birds variously modified to adapt them to their environment?

- b. On hummingbirds:
 - (1) What do hummingbirds eat in the wild and how often?

- (2) Why aren't hummingbirds afraid of large mammals or birds?

- (3) How do their wings move differently from other birds?

(4) How fast do they fly?

(5) How fast do the wings and heart beat?

(6) How is the tongue shaped?

5. Identify on a bird's wing the primaries, secondaries, coverts, axillars, and alulae.

6. Describe the functions and purposes of bird banding, telling in particular how banding contributes to our knowledge about bird movements.

7. Name the main migratory bird flyways used by birds in your continent.

8. Give the migration routes and terminal destinations for ten different migratory bird species.

	Bird	Routes/Destinations
1.	<hr/>	<hr/>
2.	<hr/>	<hr/>
3.	<hr/>	<hr/>
4.	<hr/>	<hr/>
5.	<hr/>	<hr/>
6.	<hr/>	<hr/>
7.	<hr/>	<hr/>
8.	<hr/>	<hr/>
9.	<hr/>	<hr/>
10.	<hr/>	<hr/>

- ❑ 9. Describe at least three different ways that birds are able to orient themselves in their movements across the globe.
 - 1. _____
 - 2. _____
 - 3. _____

- ❑ 10. Make a list of 60 species of wild birds, including birds from at least ten different families, that you personally have observed and positively identified by sight out of doors. For each species on this list note the following: (Complete Chart #1)
 - a. Name
 - b. Date observed
 - c. Place observed
 - d. Habitat (i.e., field, woods, river, lake, etc.)
 - e. Status where observed (permanent resident, winter resident, summer resident, migrant, vagrant)

- ❑ 11. Present lists of birds, showing the greatest number of species seen out of doors in: (Complete Chart #2)
 - a. One day (with at least six hours in the field)
 - b. One week
 - c. Your lifetime (all birds observed by you since you began birding to date)

- ❑ 12. Make a list of ten species of wild birds that you personally have positively identified by sound out of doors, and describe or imitate these bird sounds as best you can.

Bird	Sound
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____

- ❑ 13. Lead a group in a bird observation walk or tell two Bible stories in which a bird was significant.

Date of walk: _____

OR

Bible Stories

1. _____

2. _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Cacti

1. Name the chief characteristics of a cactus.

2. Name three uses of cacti.

1. _____
2. _____
3. _____

3. In what places are cacti the most plentiful?

Why? _____

4. Know and identify from life or pictures 15 species of cacti.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____

- 5. Photograph, observe or sketch at least 10 species of cacti and classify them or grow at least 3 different species of cacti.

Cacti, Advanced

1. What are succulents?

2. Identify from plants or photos five succulents that are not cacti?
How are they different from cacti?

Succulents	Different
------------	-----------

1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

3. Know the definitions of the following terms within a cacti/succulents frame of reference.

Areole _____

Cephalium _____

Coalesce _____

Corymb _____

Diurnal _____

Epiphyte _____

Glochid _____

Nocturnal _____

Offshoot _____

Panicle _____

Scale _____

Stolon _____

Zygomorphic _____

4. When raising succulents—including cacti—they may be attacked by maladies. What are the most common and how can you prevent or cure the problems?

	Maladies	Prevent/Cure
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

5. Propagate at least one plant by using one of the following methods: from seed, by cuttings, or grafting.

Method used _____



Pathfinder's Name

Cats

1. What is the scientific name of the cat family?

2. How is the structure of the paw similar in all cats?

3. How are the eyes of all cats alike?

4. What is the main food of the cat family?

How are the cat's teeth fitted for this?

5. Of what use are the cat's whiskers?

6. How are the cat's ears protected?

7. Identify from pictures or personal observation four kinds of domesticated cats. Describe each one's temperament.

Domesticated cats

Temperaments

1. _____

2. _____

3. _____

4. _____

8. Of what benefit to man are domesticated cats?

9. Identify from pictures or personal observation seven kinds of undomesticated cats. Tell in what part of the world they are found.

Undomesticated cats	Where found
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____

10. What animal is known as the king of beasts?

Why does it have that title?

What is it's temperament really like?

11. Tell the story of Androcles and the Lion.

12. Relate four stories from the Bible in which a member of the cat family is mentioned.

1. _____

2. _____

3. _____

4. _____

Cats, Advanced

- ❑ 1 Have the basic Cat Honor.
- ❑ 2. Know about cats “open-book” quiz. (This is not an instructional pass-a-test requirement, it is designed to encourage research into the world of cats.) Enjoy new discoveries as you research the following questions about some unusual domestic cat breeds from around the world.
 - a. The domestic cat known as Sphynx first appeared in the late 1960s. Which of the following is true about this Canadian breed?
 - (1) It is too wild to be a proper house cat.
 - (2) It is the national pet of Canada.
 - (3) It appears to be hairless.
 - b. True or False: The Chartreux, with its brilliant orange eyes and blue lips, is a breed closely associated with France.
 - c. Match the following cats with the special characteristics of their breed:
 - (1) Korat (Thailand) (a) Goes limp when picked up.
 - (2) Ragdoll (USA) (b) Is traced to wild cats from Kenya.
 - (3) Sokoke (Denmark) (c) Symbolizes good fortune.
 - d. The Scottish Fold breed dates back to 1961. True or False: This cat acquired its name because it folds its body up to stay warm.
 - e. One breed was developed from a type of cat which once roamed the streets of Singapore. Now called the Singapura, it is also known by which one of the following names?
 - (1) Drain cat
 - (2) Fat cat
 - (3) Flying cat
 - f. The names of breeds do not always reflect their countries of origin. For example, the Nebelung (German for “creature of the mist”) breed was developed in the USA. True or False: The Poodle cat was developed in Germany.

- g. The English are renowned cat fanciers. Which one of the following is not a breed of domestic cat developed in the UK?
 - (1) Abyssinian cat
 - (2) Havana Brown cat
 - (3) Geoffroy's cat

- h. Developed in the USA, the Ocicat is a wild-looking feline with spotted fur. True or False: it is illegal to keep the Ocicat as a house pet in most countries.

- i. Originally called the Spotted Mist, this Australian breed's name was changed when some were born with tabby-patterned coats. What is its new name?
 - (1) Australian Mist
 - (2) Dingo cat
 - (3) Spotted and/or Marbled Mist

- j. The Japanese Bobtail cat originated in China centuries ago. True or False: It is the only breed of domestic cat with virtually no tail.

- 3. Keep a cat for at least six months and do one of the following:
 - a. If you currently have a cat, keep a record of the care for you cat for one month. Include in your record when it is watered and fed, how the liter box is taken care of. (Complete Chart #1)

Why should your cat not be allowed to roam the neighborhood free?

 - b. If you do not currently have a cat but you owned one at sometime in the past for at least 6 months, take care of someone else's cat for at least one week. Record the care that was required and explain the relationship of house cats on the environment and why it is best they not be allowed to become feral. (Complete Chart #2)

 - c. Participate in a cat related project of your choice in support of a local humane society or similar organization.

Project _____

Cats, Advanced Chart #1

If you currently have a cat, keep a record of the care for you cat for one month. Include in your record when it is watered and fed, how the liter box is taken care of.

Day 1	Day 8	Day 15	Day 22	Day 29
Day 2	Day 9	Day 16	Day 23	Day 30
Day 3	Day 10	Day 17	Day 24	Additional Notes:
Day 4	Day 11	Day 18	Day 25	
Day 5	Day 12	Day 19	Day 26	
Day 6	Day 13	Day 20	Day 27	
Day 7	Day 14	Day 21	Day 28	

Cats, Advanced Chart #2

If you do not currently have a cat but you owned one at sometime in the past for at least 6 months, take care of someone else's cat for at least one week. Record the care that was required and explain the relationship of house cats on the environment and why it is best they not be allowed to become feral.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Additional Notes:						



Pathfinder's Name

Dog Care and Training

1. Describe the steps you should take in the following areas of dog care:
Selection _____

Registration _____

Shots _____

2. Do at least two of the following:
Describe what can be done to remove fleas, ticks, and lice from
your dog. _____

Mention some of the diseases, pests, and worms that dogs can get.

Explain what you should do for a dog bite.

3. Describe how to housebreak a puppy.

4. Explain in detail how you would wash a dog and care for its general
hygiene.

- ❑ 5. Take full responsibility for feeding and watering a dog for two or three months.
- ❑ 6. Train your dog until you can successfully demonstrate the following:
 - a. Heel: Your dog walks close to your left side and sits when you halt.
 - b. Figure 8: Your dog stays close to your side without sniffing people, fire hydrants, or other dogs.
 - c. Stand for examination: Your dog allows strangers to touch him.
 - d. Recall: Your dog comes when called, sits directly in front of you, and moves to your left side on command.
 - e. Long sit and long down: Your dog stays in either position while you attend to other business.

* If at all possible, dogs and handlers should get instructions from a qualified teacher, preferably in a class. A certificate of completion of training in any dog obedience class with a qualifying score of 170 out of the possible 200 will be accepted for this honor.



Pathfinder's Name

Dogs

1. Give the scientific name of the dog family.

2. Name five distinctive characteristics of the dog family.
1. _____
 2. _____
 3. _____
 4. _____
 5. _____
3. Identify from pictures or personal observation five wild members of the dog family.
- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | |
4. Identify from pictures or personal observation 25 different breeds of dogs.
- | | |
|-----------|-----------|
| 1. _____ | 14. _____ |
| 2. _____ | 15. _____ |
| 3. _____ | 16. _____ |
| 4. _____ | 17. _____ |
| 5. _____ | 18. _____ |
| 6. _____ | 19. _____ |
| 7. _____ | 20. _____ |
| 8. _____ | 21. _____ |
| 9. _____ | 22. _____ |
| 10. _____ | 23. _____ |
| 11. _____ | 24. _____ |
| 12. _____ | 25. _____ |
| 13. _____ | |

- 5. Name five contributions the dog family has made to man.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

- 6. Give the name of the smallest and largest breed of dog.

Smallest _____

Largest _____

- 7. Write or describe orally the value to man of the following dogs:

Seeing-eye _____

Saint Bernard _____

Shepherd _____

Collie _____

Eskimo _____

- 8. Write or tell what special contribution dogs have made to man in wartime.

- 9. Identify from pictures or personal observation five dogs that are classed as "toy" dogs.

1. _____	4. _____
2. _____	5. _____
3. _____	

- 10. What is the only dog that has a wholly blue or black tongue?

11. Which is the fastest-running dog?

12. Which member of the "toy" dogs has become the most popular?

13. What dog has been especially helpful in tracking criminals?

14. Write or tell a dog story.



Pathfinder's Name

Ecology

- 1. Construct a diagram of a fresh-water pond ecosystem with pasted-on animal cutouts.
- 2. Pick one mammal, bird, reptile, and amphibian from your home environment, and for each construct a diagram of its ecological pyramid.

Mammal _____ Bird _____

Reptile _____ Amphibian _____

- 3. Know the meaning of the following terms:

Ecology _____

Community _____

Food chain _____

Commensalism _____

Ecological succession _____

Plankton _____

Conservation _____

Climax community _____

Eutrophication _____

Biome _____

4. Make detailed field observations and a careful library book study of the habitat of some small animal in your own environment. Write a report of about 700 words, one-half from your field observations and one-half from your book study.

5. Define an ecosystem and state what the basic biological and physical factors are that keep it a balanced system.

Ecosystem _____

Biological factors _____

Physical factors _____

6. Investigate the disposal of trash in your community. How much is disposed per family per day?

per week? _____

per year? _____

How better can it be taken care of?

7. Check the daily paper for one month for the nearest large city for the air pollution level or air quality and plot on graph paper the results for the month. Find out what caused the peaks on your graph.

- 8. List ten ways in which you might actively work to improve the environment in which you live. Put four of these into practice.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____

- 9. Find a Spirit of Prophecy quotation and a Bible text pertinent to ecology, and be able to explain their relevance and application to our day.

Spirit of Prophecy _____

Bible Text _____

Explanation _____

Ecology, Advanced

- 1. Have the Ecology Honor.
- 2. State the first and second laws of thermodynamics and explain how they are important to ecology.

First law _____

Second law _____

Explanation _____

- 3. Explain the three basic trophic (feeding) levels and give a good example of a plant or animal for each.

Levels	Example
1. _____	_____
2. _____	_____
3. _____	_____

- 4. Explain or diagram the three types of ecological pyramids in the food web. Give an example of each layer of the pyramid.

1. _____

2. _____

3. _____

- ❑ 5. Define the biogeochemical cycle, and explain or diagram all the basic components the cycle passes through.

- ❑ 6. Diagram or explain the basic steps in the flow of energy through the biotic environment (element) of an ecosystem. Begin with the sun.

- ❑ 7. Explain Liebig's Law of The Minimum and Shelford's Law of Tolerance, and state how these laws tell us how and why certain plants and animals become endangered or are eliminated when their habitat or community gets disturbed OR out of balance.

Liebig's Law _____

Shelford's Law _____

- ❑ 8. Choose a biological community in your area, such as a forest or woods; a swamp, lake or pond; pasture or meadow grassland; or a canyon or creek woods, etc., that is disturbed or ecologically out of balance in some way.

Make a description of it, including how and to what extent it is disturbed. Then make recommendations as to how the community could be improved and, where possible, follow through and help to improve it in some way.

- ❑ 9. Spend a minimum of 20 hours doing active, productive work on an ecology project in your area. This may be done individually or as a group. Describe the project in general, but report specifically on your part in it.

❑ 10. Define the following terms:

Community _____

Ecological balance _____

Raw materials _____

Saprobe _____

Photosynthesis _____

Decomposer _____

Chemosynthesis _____

Producer _____

Autotrophy _____

Consumer _____

Heterotrophy _____

Limited factor _____

- ❑ 11. Find a Spirit of Prophecy quotation and a Bible text pertinent to ecology and explain their relevance and application to our day.

Spirit of Prophecy _____

Bible Text _____

Explanation _____

NOTE: These requirements may be expressed either verbally or in writing to a youth leader. An instructor is recommended but not required for this honor. Counsel with your youth leader or instructor before beginning requirements seven, eight and nine.

Date completed _____

Instructor's Signature _____



Pathfinder's Name _____

Edible Wild Plants

1. Photograph, collect pictures of or sketch fifteen edible wild plants. Identify each plant in the wild.

1. _____	6. _____	11. _____
2. _____	7. _____	12. _____
3. _____	8. _____	13. _____
4. _____	9. _____	14. _____
5. _____	10. _____	15. _____

2. Identify in the wild five trees and five shrubs which are edible.

Trees

Shrubs

1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

3. Identify, prepare, and eat three kinds of wild berries or fruits, three kinds of beverages, three salad plants, three potherbs (greens), and two tubers or roots.

Wild Berries/Fruits

Beverages

1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

Salad Plants

Potherbs (greens)

1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

Tubers or Roots

- 1. _____
- 2. _____

- 4. Demonstrate the preparation of wild foods in each of the following ways:
 - a. Boiling
 - b. Frying
 - c. Roasting
 - d. Baking
 - e. Demonstrate how to prepare four parts of the common milkweed or day lily for food.

- 5. Explain how to identify three "odd-shaped" edible fungi and how to identify the deadly mushroom amanitas.
 - 1. _____ 3. _____
 - 2. _____
 - Amanitas _____

- 6. What root plant can be dried and ground into meal?

- 7. Know at least 8 families embracing the poisonous or doubtful plants.
 - 1. _____ 5. _____
 - 2. _____ 6. _____
 - 3. _____ 7. _____
 - 4. _____ 8. _____

- 8. What is the cardinal edibility rule?



Pathfinder's Name

Environmental Conservation

1. What is the difference between ecology and environmental conservation?

Ecology _____

Environmental Conservation _____

2. Write a 500 word essay on how the increase in human population is threatening our existence on earth.

3. What does the term “death” of a lake or river mean?

Death of a lake or river _____

Is there a lake or river in your area or country which is classified as “dead”?

4. Carry out a stream investigation of a small stream flowing through or near your home town. Check for the following:

a. Signs of Purity

- Abundance of small fish present
- Water visually clear and fresh smelling
- Stream banks covered with vegetation down to water's edge.
- Small amounts of green algae in water (light green in color)
- Some aquatic plants present, such as cattails, arrow-leaf, or pickerel weed.
- Turtles present in the stream
- Crayfish under stones in the stream
- Sandbars covered with growing weeds indicating relatively stable water level

b. Signs of Stream Deterioration and Death

- Large masses of blue-green algae present (dark green in color)
- Scoured banks from high water level during storms
- Putrid smell of the water
- Detergent foam present
- Trash sticking out of mud and sand bars along the stream
- Water loaded with silt
- No aquatic insects or fish present
- Presence of raw sewage
- Presence of oil on the surface of the water
- No salamanders or frogs under rocks along stream bank
- Stores or small factories dumping their wastes into the stream

5. If your stream is showing some of the above signs of death, do something about cleaning it up. Contact the closest government agency to ask what you and/or your group can do to help improve the stream. Organize a group of young people to help in cleaning the trash along your stream. If possible, get businesses to help in your campaign.

6. Make a visit to the city or county trash dump to see how this waste is handled. Find out the following:
How many tons of trash are dumped daily?

Yearly? _____

What attempts are made to recycle any of this trash?

Is any of the trash burned or is all of it buried?

What is the cost per person per year for handling the trash?

What happens to junked autos in your area?

- 7. Make a visit to the nearest sewage plant. Draw and label a detailed diagram of what happens to the liquid and solid wastes from the time they come into the plant until they leave. In what form do they leave? Is any further use made of this waste?

- 8. Visit the nearest water purification plant. Construct a flow diagram of the steps in water purification from the time the water enters the plant until it leaves for distribution to homes and stores. Through reading and discussion with water works officials, determine whether water resources in the future are going to be enough to meet the demand.

- 9. Read and write a book report on an environment issues book such as Rachel Carson's Silent Spring.

- ❑ 10. What are rare and endangered species?

Determine what efforts are being put forth to protect such species in your area.

What can you do to help? Write a 300-500 word paper on your ideas.



Pathfinder's Name

Ferns

1. How are ferns different from flowering plants or trees?

Ferns _____

Flowering plants or trees _____

2. Where is the true stem of a fern?

What part grows above the ground?

What is the most favorable environment in which ferns grow?

3. How do ferns reproduce?

Locate and describe three kinds of sori (from three kinds of ferns).

1. _____

2. _____

3. _____

4. How do spores travel from the parent plant to a new location?

How long does it take a spore to develop into a mature plant?

Observe from live ferns or pictures how a young fern is different from an adult fern.

- ❑ 5. Know the medicinal uses of three ferns.

Ferns	Medical Use
1. _____	_____
2. _____	_____
3. _____	_____

- ❑ 6. Draw or photograph ten kinds of ferns and properly identify them.

- ❑ 7. In addition to the common ferns there are fernlike plants known as club mosses and horsetails. Be able to recognize two club mosses and one horsetail.

Club Mosses	Horsetail Moss
1. _____	_____
2. _____	_____

How are they similar to ferns?



Pathfinder's Name

Fishes

1. Name ten families of fishes.

1. _____	6. _____
2. _____	7. _____
3. _____	8. _____
4. _____	9. _____
5. _____	10. _____

2. Identify from pictures or personal observation ten tropical fishes. Explain their breeding habits. Give the habitat or country in which they are found.

Fish	Breeding Habits	Habitat
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____
7. _____	_____	_____
8. _____	_____	_____
9. _____	_____	_____
10. _____	_____	_____

- ❑ 3. Identify from pictures or personal observation ten fishes native to your own country. Explain their feeding and breeding habits.

	Fish	Feeding Habits	Breeding Habits
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____

- ❑ 4. Define the following parts of a fish:

Dorsal fin _____

Lateral line _____

Pectoral fin _____

Operculum _____

Pelvic fin _____

Barbels _____

Anal fin _____

Swim bladder _____

Caudal fin _____

Gills _____

5. State briefly the proper care and feeding of fishes of:
Tropical zone _____

Temperate zone _____

6. Fill an aquarium containing at least five gallons of water with a balance of plants and fishes, either tropical or native, and maintain the same for at least six months.

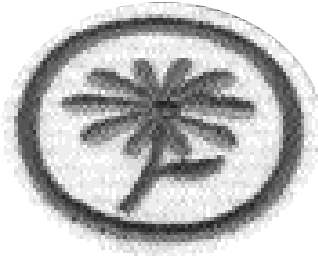
7. Note the effect of the following on the fishes and aquarium in general:
Too much light _____

Too little light _____

Overfeeding _____

Excessive change in water temperature _____

Too few plants and too many fishes _____



Pathfinder's Name _____

Flowers

- 1. Draw or photograph 35 kinds of flowers and identify them correctly.
- 2. Draw and properly label or point out the actual parts of a flower:
 - a. Pistil
 - b. Stamen
 - c. Petal
 - d. Sepal
- 3. Name six flower families and their distinguishing characteristics. Name at least two flowers in each family. (Complete Chart)
- 4. Describe the life history of a particular flower, including the part played by insects or wind in pollination.

- 5. Name at least two plants that are poisonous to touch and state which, if any, are found in your locality.

Name

Locality (Y/N)

- 1. _____
- 2. _____

- 6. Do three of the following:
 - a. Arrange, draw, or photograph a series of at least six flowers, showing in order the colors of the rainbow-red, orange, yellow, green, blue and violet.
 - b. Submit fresh, pressed, or dried flowers having five petals, four petals, three petals, and no petals.
 - c. Distinguish and name two out of five wild or cultivated flowers by their odor while blindfolded.

- d. List flowers that you have observed being visited for food by the following:

Birds _____

Honeybees _____

Bumblebees _____

Butterflies _____

Moths _____

- e. Watch a flower for at least ten minutes in the sunshine and at least ten minutes after dusk, and report on any insect visitors. State the number and kind of visitors and name of flower.

Flower _____

Sunshine: Number and types of insects _____

After dusk: Number and types of insects _____

Flowers Chart

	Flower Family	Distinguishing Characteristics	2 Flowers in each family
1			1 2
2			1 2
3			1 2
4			1 2
5			1 2
6			1 2

Flowers, Advanced

- 1. Have the Flower Honor.
- 2. Photograph, collect pictures of or sketch 75 species of flowers. Make a scrapbook from these and correctly label each flower.
- 3. Give the distinguishing characteristics of the flowers of each of the 12 common plant families.

Family	Distinguishing Characteristics
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____
11. _____	_____
12. _____	_____

- 4. Prove ability to use plant keys to genus and species.
- 5. Tell the difference between perfect and imperfect flowers.

Perfect _____

Imperfect _____

What is meant by pistillate and staminate flowers?

Pistillate _____

Staminate _____

Give an example of monoecious and dioecious plants.

Monoecious _____

Dioecious _____

Tell the difference between monocotyledons and dicotyledons.

Monocotyledons _____

Dicotyledons _____

6. From the Bible point out two spiritual lessons in which writers used flowers for illustrations.

1. _____

2. _____

7. Name and describe eight poisonous plants, noting the particular part of the plant that is poisonous.

Plant	Part of plant poisonous
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

- ❑ 8. Do one of the following:
- a. Name five plants that are of medicinal value and indicate what part of each plant is used.

	Plant	Part of plant used
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

- b. Name ten wild plants that are edible in root, stem, or leaf.

1.	_____	6.	_____
2.	_____	7.	_____
3.	_____	8.	_____
4.	_____	9.	_____
5.	_____	10.	_____

- c. An option from requirement 6 of the Flower Honor not completed for that Honor.



Pathfinder's Name

Fossils

- 1. Make a collection of at least ten different kinds of fossils and label each with its name and geographic location.
- 2. Have a brief definition of each of the following in your notebook:

Geology _____

Calamite _____

Fossils _____

Foraminifera _____

Catastrophism _____

Radiolaria _____

Paleontology _____

Paleozoic _____

Graptolite _____

Mesozoic _____

Trilobite _____

Cenozoic _____

Dinosaur _____

Pleistocene _____

Mammoth _____

Paleobotany _____

Mastodon _____

Pelecypod _____

Crinoid _____

Brachiopod _____

Lingula _____

- 3. Visit a museum where fossils are on display and make a written or oral report of your trip.
- 4. Describe the process of the proper removal of delicate specimens.

Tell how a skeleton of a dinosaur or other gigantic fossil would be removed.

Why should beginners not remove such specimens?

What should be done by the beginner when he finds what is obviously a valuable fossil?

- 5. Explain the difference in the account scientists give for the presence of fossils as related by evolutionists and creationists.

Evolutionists _____

Creationists _____

- 6. The Bible and writings of Ellen G. White cite statements to explain the origin of the following:

Coal _____

Petroleum _____

Fossils _____

Limestone _____



Pathfinder's Name

Fungi

1. Give the name of five classes of fungi and examples of each.

Class

Examples

- | | | |
|----|-------|-------|
| 1. | _____ | _____ |
| | | _____ |
| 2. | _____ | _____ |
| | | _____ |
| 3. | _____ | _____ |
| | | _____ |
| 4. | _____ | _____ |
| | | _____ |
| 5. | _____ | _____ |
| | | _____ |

2. Identify fifteen common fungi of your locality. Draw or photograph them from live specimens.

3. Name three important fungi and tell what their value is.

Fungi

Value

- | | | |
|----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |

4. Tell the life history of one example of each of the following:
Rust _____

Mold _____

Mushroom _____

Yeast _____

- 5. Identify five fungus plant diseases.

1. _____ 4. _____
2. _____ 5. _____
3. _____

- 6. Know what safety precautions to observe when handling fungi.



Pathfinder's Name

Geology

1. Give the geological meaning of the following words:

Delta _____

Cirque _____

Sand spit _____

Mesa _____

Sinkhole _____

Alluvial fan _____

Oxbow lake _____

Anticline _____

Moraine _____

Syncline _____

- ❑ 2. Describe the following:
 - a. A shield-type volcano as compared to a composite volcano
Shield _____

Composite _____

 - b. How a glacier moves and what evidences it leaves behind

 - c. How sediments are laid down by water

 - d. The different types of mountains

 - e. Why a river or stream bank often keeps caving in on the outside of a bend

- ❑ 3. Know what category of rocks (sedimentary, metamorphic, or igneous)

the following rocks are:

	Type
Granite	_____
Marble	_____
Sandstone	_____
Lava	_____
Conglomerate	_____
Limestone	_____
Slate	_____
Basalt	_____
Shale	_____
Gneiss	_____

4. Take a picture or make a sketch of each of the following geological features:
- a. A bed of sediment that is coarser at the bottom and finer toward the top (This is called normal graded bedding.)
 - b. Ripple marks in sand or mud (Show with an arrow the current direction if possible.)
 - c. Gulley erosion
 - d. Mud cracks (These can usually be found after a heavy rain or flood when mud starts to dry.)
 - e. Soil profile along a stream bank or road cut (You should be able to see how soil usually becomes lighter colored downward from the surface of the ground.)
 - f. Sand bar (Sand bars can be found in rivers or streams, or along the ocean.)

Geology, Advanced

- 1. Have the Geology Honor.
- 2. Provide the following information:
 - a. How do earthquakes tell us what the interior of the earth is like?

- b. How can a lot of water (as in Noah's flood) do in a few months what a little water would require thousands or millions of years to do?

- c. Why are evidences of glaciers seen in the temperate climes where there are now no glaciers?

- d. How do creationists, who believe in a universal flood and in a young age for the earth since creation, understand and use the geological time chart?

- e. What is the continental drift (plate tectonics) theory, and how can

creationists fit such geological activity into time since creation?

3. Where in the world would you likely see:

Large glaciers _____

Faultblock mountains _____

Active volcanoes _____

Folded mountains _____

Sand dunes _____

Chalk cliffs _____

Sinkholes _____

Icebergs _____

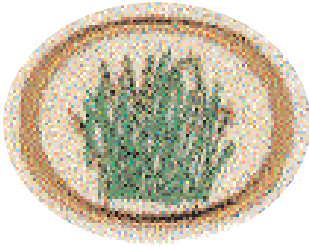
Fiords _____

Atolls _____

4. Write a 500-word paper on one of the following:

a. Describe the interesting geology you saw on a trip you took recently.

b. Describe the geological activity that happened because of a heavy rain, flood, or windstorm that you experienced.



Pathfinder's Name _____

Grasses

1. What characteristics must a plant have to qualify as a grass?
- _____
- _____
- _____
2. What kind of roots do all grasses have?
- _____
- _____
3. About how many species around the world are there in the grass family called Gramineae or Poaceae?
- _____
- _____
4. Do the seeds of grasses have two halves as does the bean (a dicotyledon), or does the seed consist of just one part as do the lily, date, and coconut (monocotyledons)?
- _____
- _____
5. What unique characteristic in the growth of grass leaves makes it possible for the plant to flourish even though continually mowed or grazed?
- _____
- _____
6. Name three annual grasses, that is, grasses that sprout from seeds, blossom, bear seeds, and then die the same summer.
1. _____ 3. _____
2. _____

7. Name three perennial grasses, that is, grasses whose roots live on from year to year, although the top dies down to the crown each autumn.

1. _____ 3. _____

2. _____

8. In each of the following cases name a single grass, or more where indicated, from which the product is made:

Bread (three grasses) _____

Brooms _____

Fishing poles _____

Gluten _____

Grain alcohol (two grasses) _____

Hay _____

Hominy _____

Molasses _____

Oatmeal _____

Starch _____

Sugar _____

White flour _____

9. Do one of the following:

a. Collect and correctly label ten cultivated grasses.

b. Write an essay on the various uses of grasses by different people around the world.

10. Press or dry, mount, and correctly label the flower stalks or seed stalks of five pestiferous grasses that are commonly considered to be weeds.

11. In addition to your collection of flower or seed stalks of pestiferous kinds, press, mount, and correctly name the flower stalks or seed stalks of ten additional grasses that grow in your neighborhood. This collection may include some of the plants whose seeds are in your collection of cultivated grasses.



_____ Pathfinder's Name

House Plants

- 1. Name at least five house plants raised for their foliage.
1. _____ 4. _____
2. _____ 5. _____
3. _____
- 2. Name three house plants raised for their flowers.
1. _____ 3. _____
2. _____
- 3. Name three house plants adapted to direct sunlight, dry soils, and very moist soils.

Sunlight	Dry soils	Very moist soils
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
- 4. Most house plants like a 65-to 75-degree (18 C - 22 C) temperature. Name one that requires a cool room (45 to 55 degrees F.) (7 C - 13 C).

- 5. Prepare a special potting mix soil including at least 3 different ingredients. Select two house plants from requirement two and grow them in this soil for three weeks.
- 6. How much light does an African violet need?

Where in the house is the best place to grow them?

Grow two or more African violets.

7. All gesneriads need approximately the same growing conditions. Where do they come from originally?

What kind of temperature, light, and humidity do they need?

8. Name two house plants that can be propagated from leaves, stem sections or divisions.

Leaves _____

Stem sections _____

Divisions _____

Select one plant from requirement two above, experiment with each of these methods of propagation and keep them growing for three months.

9. What is a Bonsai? _____

10. What is humidity? _____

How is it important to house plants? _____

11. Below is a lists of plants to chose from for requirement five and eight above:

- | | |
|---------------------|--------------------|
| a. Narcissus | l. Spider plant |
| b. Aspidistra | m. Geranium |
| c. Philodendron | n. Maidenhair fern |
| d. Aluminum plant | o. Begonia |
| e. Daffodil | p. Ficus |
| f. Sanseveria | q. Tulip |
| g. Boston fern | r. Iris |
| h. Piggy-back plant | s. Crocus |
| i. Bird's nest fern | t. Coleus |
| j. Caladium | u. Hyacinth |
| k. Gloxinia | |



Pathfinder's Name

Insects

- 1. Do one of the following:
 - a. Mount a collection of 20 species of insects representing at least six different orders excluding moths or butterflies. (Carelessly mounted specimens will not be acceptable.)
 - (1) Place under each specimen a label showing the locality where caught, the date caught, and the collector's name. Labels should not be larger than 1/4 x 3/4 inches (6 mm x 20 mm).
 - (2) Identify insects with common names and genus or species level on second labels to be mounted below the first.
 - (3) Arrange all specimens neatly in an insect box according to orders and families. Orders should be pinned to the box rather than attached to the individual insect pins.
 - b. Make colored drawings or paintings of 20 species of insects, representing at least six different orders. Drawings or paintings need to be life size or larger, to show the details of small insects, and in natural coloring. Label the drawings with common names and genus or species level names.
 - c. Take color pictures of 20 species of insects, representing at least six different orders. All pictures should be in focus, close-ups and properly labeled, showing where photographed, the date photographed, common names and genus or species level names.

- 2. What are the distinguishing characteristics of an insect?

- 3. Name five species of injurious insects and tell how to control them.

1. _____ 4. _____

2. _____ 5. _____

3. _____

Control: _____

❑ 4. Name five species of useful insects.

1. _____ 4. _____

2. _____ 5. _____

3. _____

Control: _____

❑ 5. Tell two Bible stories in which insects played an important part.

1. _____

2. _____

Insects, Advanced

- 1. Have the Insects Honor.
- 2. Do one of the following:
 - a. Add to your collection 50 species of insects representing at least ten different orders. Labels must include collector's name, date, locality, order, family, and genus or species level name. (Carelessly mounted or broken specimens are not acceptable.)
 - b. Add to your colored drawings or paintings 50 species of insects, representing at least ten different orders. Drawings or paintings need to be life size or larger, to show the details of small insects, and in natural coloring. Label drawings with date, order, family, and genus or species level name.
 - c. Add to your colored pictures 50 species of insects, representing at least ten different orders. All pictures are to be infocuse, close-ups and properly labeled, showing where photographed, the date photographed, and order, family , and genus or species level name.
- 3. How do the special structures and habits of insects fit them so admirably for life?

- 4. Explain the life cycle of four insects in four different families.

1. _____

2. _____

3. _____

4. _____

5. Name two kinds of social insects. How do they differ from nonsocial insects?
1. _____ 2. _____
Social _____
Nonsocial _____

6. Name at least four insects that carry disease to man. Name at least one disease carried by each.

Insects	2 Disease
1. _____	_____ / _____
2. _____	_____ / _____
3. _____	_____ / _____
4. _____	_____ / _____

7. Make one of the following:
a. Aerial net
b. Sweeping net
c. Aquatic net

8. Construct and use a trap for night-flying insects.

9. Do one of the following:
a. Identify from pictures or from live insects one belonging in each of the following:
(1) Aquatic
(2) Leaf mining
(3) Leaf rolling
(4) Wood boring
(5) Paper eating
(6) Parasites on the body of bird or mammal.

- b. Describe the castes of termites and honey bees.

Termites _____

Honey Bees _____

- c. Compare the degree of intelligence exhibited by a grasshopper or a beetle, and an ant, bee, or wasp.

Grasshopper _____

Beetle _____

Ant, Bee or Wasp _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Lichens, Liverworts, and Mosses

- 1. Know the life cycle of a moss, lichen, or liverwort.

- 2. What are lichens? _____

- 3. Name at least two ways lichens have been of value to man.
 - 1. _____
 - 2. _____
- 4. How are liverworts different than all other green plants?

Name one used in aquariums _____

What is its function? _____

- 5. Describe at least three significant ways moss has played in the economy of man.
 - 1. _____
 - 2. _____
 - 3. _____
- 6. Make a moss garden (small terrarium) or "eternal garden" using at least three different kinds of mosses and lichens.

- ❑ 7. Find and identify five lichens, one liverwort, and six mosses.

Lichens

1. _____
2. _____
3. _____
4. _____
5. _____

Liverwort

1. _____

Mosses

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

- ❑ 8. Observe the spore caps of several different kinds of moss under a magnifier to see the differences in "hair caps" and "teeth" that separate many species.



Pathfinder's Name

Livestock

(Changed from Domestic Animals)

1. Distinguish between the draft horse and the light horse.

Draft Horse _____

Light Horse _____

2. Identify from pictures or personal observation, and record the height, weight, color, and disposition of at least three of the following horses:

a. Percheron

b. Belgina

c. Clydesdale

d. Arabian

e. Shetland

Breed	Height	Weight	Color	Disposition
-------	--------	--------	-------	-------------

1.	_____	_____	_____	_____
----	-------	-------	-------	-------

2.	_____	_____	_____	_____
----	-------	-------	-------	-------

3.	_____	_____	_____	_____
----	-------	-------	-------	-------

3. List four physical characteristics of the mule.

1. _____

2. _____

3. _____

4. _____

4. Identify a burro from a picture or live. Give its size, color, and usefulness.

Size _____

Color _____

Usefulness _____

- ❑ 5. Identify from pictures or live animals four kinds of milk cattle and four kinds of beef cattle.

Milk Cattle

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Beef Cattle

- 1. _____
- 2. _____
- 3. _____
- 4. _____

- ❑ 6. Know the milk-producing qualities of the Jersey, Guernsey, and Holstein breeds.

Jersey _____

Guernsey _____

Holstein _____

- ❑ 7. What is the difference between the Angora and milch goats?

Angora _____

Milch _____

Give the distinguishing colors of at least three different breeds of goats, such as Saanen, Toggenburg, Nubian, and British Alpine.

	Breed	Color
1.	_____	_____
2.	_____	_____
3.	_____	_____

- ❑ 8. Identify from pictures or live sheep and note wool and meat production, size, markings, and general appearance of three breeds of sheep, such as Merino, Rambouillet, Shropshire, Hampshire, and Lincoln.

	Breed	Size	Markings	Appearance
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____



Pathfinder's Name

Mammals

1. What Bible verse gives the day mammals were created?

2. List four characteristics of a mammal.
1. _____
 2. _____
 3. _____
 4. _____
3. Give one or more identifying characteristics of each of the following orders of mammals, and name one or more species of mammals found in each order:

	Characteristics	Species
Marsupialia	_____	_____
Rodentia	_____	_____
Insectivora	_____	_____
Lagomorpha	_____	_____
Chiroptera	_____	_____
Artiodactyla	_____	_____
Carnivora	_____	_____
Sirenia	_____	_____
Pinnipedia	_____	_____
Cetacea	_____	_____

4. List four beneficial mammals and tell how they are beneficial.

	Mammals	How are they beneficial
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

5. List four things mammals do that are harmful.
1. _____
 2. _____
 3. _____
 4. _____

6. List four mammals that are completely aquatic and designate their natural range.
1. _____
 2. _____
 3. _____
 4. _____

7. Name the largest mammal in the world and tell where it lives, how it feeds, and what it eats.
- Mammal _____
- Lives _____
- Feeds _____
- Eats _____

8. List eight species of wild mammals that are in your region. Spend at least 5 hours searching for wild mammals in their natural habitat.
- | | |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

9. Write or tell a story about "Wild Mammals I Have Observed".

Mammals, Advanced

- 1. Have the Mammals Honor
- 2. What mammals in your locality are protected by law?

Why? _____

- 3. How do the processes of birth and care for the young differ in monotremes and marsupials from all other orders of mammals?
Monotremes _____

Marsupials _____

- 4. Name five different ways in which mammals protect themselves and their young, and cite an example of each.

Ways of protection	Examples
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
- 5. What mammals are agents for the transmission of tularemia, bubonic plague, trichinosis, and rabies?
Tularemia _____
Bubonic plague _____
Trichinosis _____
Rabies _____

- ❑ 6. List 15 species of wild mammals which you personally have observed and identified in the wild. For each one listed, include the following data: (Complete Chart #1)
- a. Name
 - b. Date observed
 - c. Locality
 - d. Habitat (woods, field, swamp)
 - e. Time of day
 - f. Behavior (what the animal was doing)

Date completed _____

Instructor's Signature _____

Mammals, Advanced Chart #1

#	Name	Date Observed	Locality	Habitat	Time of day	Behavior
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						



Pathfinder's Name

Maple Sugar

1. What part of the world and time of year does the maple sugar industry function and why?

Part of the world _____

Time of year _____

Why _____

2. Explain how sweet sap is made by the maple tree and how it is stored over the winter.

Made _____

Stored _____

3. Identify the sugar maple tree by its bark and leaf.

4. How deep into a maple tree does one drill for best results?

5. How long does it take for a healthy maple tree tap's hole to heal?

6. How close to an old tap hole can a new tap hole be made?

7. How many taps can be made on a healthy maple tree without injuring it?

a. 10 inch (25.4 cm) diameter tree _____

b. 12 inch (30.5 cm) diameter tree _____

c. 24 inch (61.0 cm) diameter tree _____

d. 36 inch (91.4 cm) diameter tree _____

8. Tell how maple sugar is made from maple syrup?

9. What is the ideal weather for sap to flow?

10. Does a maple tree crown (limb & leaf area) affect the sap flow and sweetness?

11. On an average, how much sap is needed to produce one gallon of syrup?

12. Taste pure maple syrup or maple sugar.

13. Observe and explain what the following maple sugaring equipment is used for:

Drill _____

Bucket _____

Bit _____

Bucket cover _____

Spigot _____

Evaporator _____

Maple Sugar, Advanced

- 1. Have the Maple Sugar Honor.
- 2. Make at least five taps and boil down at least two quarts of syrup.
- 3. Collect a leaf and bark from two maples.
- 4. List two usages of the sugar maple other than maple sugaring.
 - 1. _____
 - 2. _____
- 5. What do you look for in tapping a maple tree?

- 6. When is the right time to tap a maple tree in the spring?

- 7. Name the four maples that produce sweet sap.
 - 1. _____ 3. _____
 - 2. _____ 4. _____
- 8. What is the size of the drill bit? (2 sizes)
 - 1. _____ 2. _____
- 9. How can sap spoil and how is it like milk?

- 10. What is the maple sugaring legend?

- 11. To make one quart of syrup, how many quarts of sap will you need?
_____ Quarts

12. How can one tell if syrup is ready or near ready during boiling without a thermometer or hydrometer?

13. How did the early settlers become acquainted with maple sugaring?

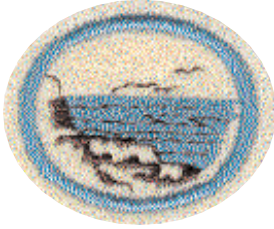
14. Visit two sugar operations.

15. Use three recipes and display them at Investiture time.

16. Make one pound of maple sugar candy and explain how it was made.

17. What is maple wax on snow?

18. When the sap is yellow and/or moths collect in the buckets, what does that usually mean?



Pathfinder's Name

Marine Algae

1. What is marine algae? _____

2. Where is it found? _____

3. What is the organ of attachment to the substratum called?

How does it differ from a true root?

4. How does size vary in marine algae? _____

5. Name the four groups of marine algae, indicating opposite the name of each group whether it is unicellular, multicellular, or both.

Group

Unicellular, multicellular, both

1. _____

2. _____

3. _____

4. _____

6. Is most green algae found in fresh or salt water? _____

7. What are diatoms? _____

8. Where does algae grow—the polar, temperate, or tropic zone?

9. Where is brown algae most invariably found—in fresh or salt water?

10. What is the greatest depth that algae grows in the ocean?

Why can it not grow in deeper water?

11. Name the three parts of a large kelp. How do they compare to the leaf, stem, and root of a plant?

Part

Comparison

1. _____
2. _____
3. _____

12. Describe the two ways that algae reproduce.

1. _____
2. _____

13. What are some of the commercial values of algae? Give at least one for each group.

Green group _____

Brown group _____

Red group _____

14. Make a collection of at least twenty specimen of marine algae properly identified, mounted, and labeled. There must be at least four specimens from the Green group, eight from the Brown group, and eight from the Red group.

15. Be able to identify by generic name at least ten types of marine algae.



Pathfinder's Name _____

Marine Invertebrates

1. Be able to identify at least one example of fifteen of the following seashore animals:
- | | |
|---------------------------------|-------------------------|
| a. Tunicate (Sea Squirt) | k. Mussel or Clamworm |
| b. Anemone (Sea Flower) | l. Sea Jelly |
| c. Chiton | m. Limpet |
| d. Hermit Crab | n. Tube Worm |
| e. Brittle Star or Serpent Star | o. Oyster |
| f. Sea Urchin | p. Amphipod (Sand Flea) |
| g. Sea Cucumber | q. Sponge |
| h. Bryozoa colony (Moss animal) | r. Sand Dollar |
| i. Barnacle | s. Coral |
| j. Sea Star | t. Ghost Crab |
2. Make a collection or photographs of the following seashore animals:
- Three kinds of crabs
 - One kind of sea star
 - Any other five animals listed in requirement 1. Hard-bodied animals, such as crabs, sea star, and chitons, may be killed in a 5% solution of formaldehyde or a 70% solution of alcohol, and then dried by a fire. The sun will cause the color to fade. Soft-bodied animals must be kept in a 3% solution of formaldehyde or a 70% solution of alcohol. If commercial formalin is used in place of formaldehyde, the above percentage figures should be doubled.
3. Describe the following processes:
- The swimming action of a sea jelly _____

 - The method of an anemone capturing food _____

c. The running of a crab _____

d. How does a sea star digest a clam or oyster when it has such a small mouth opening?

☐ 4. Name four low-tide animals and two high-tide animals.

Low-tide

1. _____ 3. _____

2. _____ 4. _____

High-tide

1. _____ 2. _____

☐ 5. Answer the following questions on relationships:

a. What relationship do crabs and barnacles have to insects?

b. What relationship does the sea squirt have to man?

c. Name a common land dweller that is related to the clamworm.

d. The octopus belongs to the phylum Mollusca. Which two animals listed in No. 1 are related to the octopus?
1. _____ 2. _____

e. Sea star, sea cucumber, and sea urchin all belong to the phylum Echinodermata. Why do they belong together? (Clue: Find out what "Echinodermata" means.)

Echinodermata _____

Why together _____

- ❑ 6. Give an oral report on two of the following activities:
 - a. Visit a seashore at night and by means of a flashlight observe the activity of animals on shore and in the water. Notice the many plants and animals visible when the beam of light is directed into the water. These minute organisms are called plankton.
 - b. Tow a fine-mesh cloth or regular plankton net through the water and observe through a microscope the many tiny animals and plants that are collected.
 - c. Select three items under #1 that are important economically. Explain why they are important.

Animal	Importance
1. _____	_____
2. _____	_____
3. _____	_____



Pathfinder's Name

Marine Mammals

1. Be able to identify three of each of the following and know where each is found. Know at least one by scientific name from each group:

	Where found	Scientific name
a.	Toothed Whales _____	_____
b.	Baleen Whales _____	_____
c.	True Seals _____	_____
d.	Eared Seals _____	_____
e.	Dolphins/Porpoises _____	_____
f.	Walrus (one kind) _____	_____
g.	Sea Otter (one kind) _____	_____
h.	Manatees _____	_____

2. Know and locate the story of how God used a whale in Bible times.

3. What is the largest mammal in the sea? _____

4. Explain the following words:

Breaching _____

Echolocation _____

Spyhopping _____

Baleen _____

Pod _____

Harem _____

Plankton _____

5. Draw a food chain of two different marine mammals.
6. What is the purpose of blubber? _____

7. Know two reasons that seals are hunted.
1. _____
2. _____

8. Describe why seals and dolphins can move so quickly in the water.

9. Do one of the following:
a. Take a trip to an aquarium. Learn about and observe the daily feeding schedule of a marine mammal.
b. Write a 500-word report on a marine mammal. Include pictures.
c. Write a 500-word report on current events involving marine mammals and their environment and how they could be endangered.



Pathfinder's Name _____

Microscopic Life

- ❑ 1. List four major types of microscopies. What are some of the characteristics of each? Be able to identify the different types of microscopes from pictures, or visit a laboratory in a university or industry which has these microscopes.

Types of Microscopes

Characteristics

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- ❑ 2. Be able to identify the following parts of a microscope and explain or demonstrate the function of each:

eye-piece or ocular _____

objective _____

body tube _____

nosepiece _____

stage _____

diaphragm _____

base _____

focus knob _____

arm _____

- ❑ 3. Know how to calculate the magnification of a compound microscope. Calculate the magnification of the microscope you use for this honor.

- ❑ 4. Define the following microscopic terms:

slide _____

coverslip _____

wetmount _____

fixing _____

staining _____

oil immersion _____

unicellular _____

multicellular _____

cilia _____

flagella _____

plankton _____

- ❑ 5. Collect samples of water (from ponds, streams, ditches, gutters, puddles, etc.) And search for living organisms using a microscope with at least 100X magnification. Draw five of these organisms as accurately as possible. As far as possible, identify and label your diagrams (include the magnification used.)

Organisms drawn

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

- ❑ 6. Draw and label a cell which includes the following parts:
cell membrane
nucleus
cytoplasm.

7. Know the kingdoms that have microscopic life forms and know two members from each.

Kingdoms

Members

- | | |
|----------|----------|
| 1. _____ | a. _____ |
| | b. _____ |
| 2. _____ | a. _____ |
| | b. _____ |
| 3. _____ | a. _____ |
| | b. _____ |
| 4. _____ | a. _____ |
| | b. _____ |
| 5. _____ | a. _____ |
| | b. _____ |

8. Give at least one example of how microscopic life is important for:
human food _____

human health _____

medicine _____

other organisms _____

9. Give at least three health habits that have been established as a direct result of harmful microscopic life. Put these habits into practice.

1. _____

2. _____

3. _____



Pathfinder's Name

Moths and Butterflies

1. What is the distinction between moths and butterflies?

Moths _____

Butterflies _____

2. Define the following terms:

antennae _____

cocoon _____

pupa _____

larva _____

chrysalis _____

3. Be able to identify three moths and/or butterflies by their cocoons.

Moths

1. _____ 3. _____

2. _____

Butterflies

1. _____ 3. _____

2. _____

- ❑ 4. What causes colored powder to come off on your hands when you handle the wings of a butterfly or moth?

Examine the powder of a butterfly or moth with a magnifying lens and describe your findings.

- ❑ 5. Name three harmful tree moths and one harmful house moth and tell during what stage of their lives they each do their damage.

	Tree moths	Damage	Stage of life
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

	Housee moths	Damage	Stage of life
1.	_____	_____	_____

- ❑ 6. What famous butterfly follows the birds southward every winter and comes north ward in the spring?

- ❑ 7. Identify in the field, then draw, photograph or collect 25 species of moths and butterflies, with not more than two specimens of any one variety. When collecting, specimens should be anesthetized by using carbon tetrachloride or other chemical in collecting jar. In either project correctly label and include the following information:
 - a. Name
 - b. Date observed
 - c. Location
 - d. Time of day
 - e. Plant on which the insect was feeding or the material on which it was perched

- ❑ 8. Describe the life cycle of a butterfly or moth. What lesson can be learned in connection with the resurrection of the righteous.



Pathfinder's Name

Orchids

1. Define the characteristics of an orchid.
- _____
- _____
2. What are the two main groupings of orchids? Name and show examples of each from a live plant or picture.
1. _____
2. _____
3. What are the differences between epiphytic, parasitic, and saprophytic orchids?
- Epiphytic _____
- _____
- Parasitic _____
- _____
- Saprophytic _____
- _____
4. Discuss the distribution of orchids, making particular reference to the occurrence of these in your area.
- _____
- _____
- _____
- _____
5. Name the main cultivated genera of orchids. Identify three from plants or picture.
- _____
- _____
- _____
- What is cultivar? _____

- 6. Discuss the main essentials to observe in the cultivation of orchids. Grow at least one orchid for at least six months.

- 7. What are the main uses of orchids?

What orchid is used commercially?

- 8. Know the laws in your area (if any) that protect wild orchids.



Pathfinder's Name

Poultry

1. Identify by description and from pictures at least five breeds of chickens such as:
Plymouth Rock (any color) _____

Wyandotte (any color) _____

Rhode Island Red _____

Orpington (any color) _____

Leghorn (any color) _____

2. State orally or write a short paragraph regarding the egg-laying or meat-producing qualities of each breed.

3. Identify by description a Peking duck. _____

4. Identify by description and from pictures three breeds of large domestic fowl such as the following turkeys:
Mammoth bronze turkey _____

White Holland turkey _____

Bourbon Red turkey _____

- ❑ 5. Identify by description and from pictures two breeds of Domestic geese such as:
Toulouse goose _____

Emden _____

Chinese Geese _____

Sebastopol Geese _____

Cape Barren Goose _____

- ❑ 6. Visit a poultry farm or Agricultural Fair and write a brief report on the various types of poultry observed.



Pathfinder's Name

Reptiles

1. What characteristics must an animal have to be classed as a reptile?

2. Name 15 reptiles (lizards, snakes, and/or turtles) found in your locality. Tell where they live, their food habits, and their economic importance. (Complete Chart #1)

3. Name five venomous reptiles of your area describing each as to the location of their fangs and geographical distribution.

	Reptile	Fang Position	Geographical Distribution
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____

4. Tell what to do if you are bitten by a venomous snake.

5. Tell what to do if you are bitten by a non-venomous snake.

- ❑ 6. Do one of the following:
 - a. Tell the life history of one representative of each:

lizard _____

snake _____

turtle _____

Compare lizards, snakes, turtles, and crocodiles as to life history, variation in eyes and ears, teeth, heart, lungs, limbs, tails, and scales (shells). (Complete Chart #2)

- b. Keep a small reptile in a terrarium and maintain a record of its care for three months. (Complete Chart #3)

- ❑ 7. Locate two Bible stories in which a reptile played an important part.

1. _____

2. _____

Reptiles, Chart #1

#	Reptile	Locality	Food Habits	Economic Importance
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Reptiles, Chart #2

	Lizards	Snakes	Turtles
Eyes			
Ears			
Teeth			
Heart			
Lungs			
Limbs			
Tails			
Scales or Shells			

Reptiles, Chart #3

Day 1	Day 8	Day 15	Day 22	Day 29
Day 2	Day 9	Day 16	Day 23	Day 30
Day 3	Day 10	Day 17	Day 24	Additional Notes:
Day 4	Day 11	Day 18	Day 25	
Day 5	Day 12	Day 19	Day 26	
Day 6	Day 13	Day 20	Day 27	
Day 7	Day 14	Day 21	Day 28	

Reptiles, Advanced

- 1. Have the Reptile Honor.
- 2. What is the study of Reptiles called?

- 3. Discover and record (or tell) at least three folk tales and three related facts about reptiles.
- 4. Why might it be that a major portion of humans fear reptiles and there are so many false stories involving reptiles?

- 5. How do reptiles protect themselves?

- 6. What are the two primary types of reptile poisons and how do they affect their target prey or enemy?

Primary types	Affect their targetprey or enemy
1. _____	_____
2. _____	_____
- 7. Identify in the wild at least half of your list from requirement 2 of the basic honor. (Complete Chart #1)
- 8. Find a reptile in the wild and record your observations of its activity during the daylight hours of one or more days. (Complete Chart #2)

Reptiles, Advanced Chart #1

#	Reptile	Locality	Food Habits	Economic Importance
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Reptiles, Advanced Chart #2

Area chosen _____

Notes

Day 1 _____

Day 2 _____

Day 3 _____



Pathfinder's Name

Rocks and Minerals

1. What is the difference between rocks and minerals?

Rocks _____

Minerals _____

2. Have a collection of at least 15 specimens correctly labeled with collector's name, date, and the locality in which it was found.

3. Define and name two examples each (from specimens or pictures) of:
Igneous _____

Sedimentary _____

Metamorphic _____

4. What is meant by Mohs' scale of hardness?

Name the minerals in order in Mohs' scale.

5. Define the following:

Cleavage _____

Specific gravity _____

Luster _____

Color _____

Streak _____

Texture _____

Crystal _____

6. Name four uses for rocks and four uses for minerals.

	Rocks	Minerals
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

7. Locate four Bible incidents in which a rock was significant.

1. _____
2. _____
3. _____
4. _____

8. What are the foundation stones of the New Jerusalem?

- | | |
|----------|-----------|
| 1. _____ | 7. _____ |
| 2. _____ | 8. _____ |
| 3. _____ | 9. _____ |
| 4. _____ | 10. _____ |
| 5. _____ | 11. _____ |
| 6. _____ | 12. _____ |

Rocks and Minerals, Advanced

- 1. Have the Rocks and Minerals Honor
- 2. Have a collection of 30 rocks and minerals properly named, 20 of which you have personally collected. Label with collector's name, date and locality in which it was found.
- 3. Know two minerals that belong to each of the following crystal systems:
Isometric 1. _____ 2. _____
Hexagonal 1. _____ 2. _____
Tetragonal 1. _____ 2. _____
- 4. Know Mohs' scale of hardness and the simplified field tests of hardness. By using these field tests, collect a scale range of specimens from your own region to form your own hardness test set.

Moh's Scale _____

- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

Field tests _____

- 5. Do one of the following:
 - a. Know and tell two different processes by which metals are extracted from ores.
 - 1. _____

 - 2. _____

b. Know eight minerals and tell how each is used.

Minerals

Used

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

6. Define the following:

Crystalline _____

Cryptocrystalline _____

Breccia _____

Noncrystalline _____

Fibrous fracture _____

Vitreous luster _____

Geode _____

Petrification _____

Stalactite _____

Fluorescence _____

- ❑ 7. What four metals are frequently found in native or free form?
 1. _____
 2. _____
 3. _____
 4. _____

- ❑ 8. Discuss the content of three statements from the writings of Ellen G. White concerning rocks or minerals.
 1. _____

 2. _____

 3. _____



Pathfinder's Name

Sand

1. Make a collection of 30 various colored sands. Correctly label with the name and locality where each was secured.

2. What does the term "sand" mean?

Name two kinds of sand.

1. _____

2. _____

3. Give the origin of sand and mineral content.

4. What is the difference between sand and soil?

Sand _____

Soil _____

5. What is meant by

shape _____

surface _____

grain fracture _____

grain size _____

❑ 6. Define the following and give the use of each:

Glacial _____

Use _____

Calcareous _____

Use _____

Quicksand _____

Use _____

Glass sand _____

Use _____

Molding sand _____

Use _____

Polishing sand _____

Use _____

Building sand _____

Use _____

Filter sand _____

Use _____

Furnace sand _____

Use _____

Lake shore sand _____

Use _____

- 7. Examine five types of sand specimens under magnification and observe their various characteristics.
- 8. Memorize and discuss Genesis 22:17, Proverbs 27:3, and Ps. 139:17-18.

Date completed _____

Instructor's Signature _____



_____ **Pathfinder's Name**

Seeds

- 1. What is the main purpose of a seed? _____

- 2. What foods were first given to man in the Garden of Eden?

- 3. Identify from a seed or drawing and know the purpose of each of these parts of a seed:
seed coat _____

cotyledon _____

embryo _____

- 4. List from memory four different methods by which seeds are scattered.
1. _____
2. _____
3. _____
4. _____
Name three kinds of plants whos seeds are scattered by each method.
1. _____
2. _____
3. _____

5. List from memory ten kinds of seeds that we use for food.
- | | |
|----------|-----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | 10. _____ |

6. List from memory five kinds of seeds that are used as sources of oil.
- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | |

7. List from memory five kinds of seeds that are used for spices.
- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | |

8. What conditions are necessary for a seed to sprout?
- _____
- _____
- _____
- _____

9. Make a collection of 30 different kinds of seeds, of which only ten may be collected from commercial seed packages, the other 20 you are to collect yourself. Label each kind as follows: seed name, date collected, location collected, and collector's name.

Seeds, Advanced

- 1. Have the Seeds Honor
- 2. Identify from drawings and know the purpose of each of the following parts of a seed:

endosperm _____

radicle _____

plumule _____

micropyle _____

- 3. Know several differences between a monocotyledon seed and a dicotyledon seed, and give three examples of each.

Monocotyledon

Dicotyledon

Differences

Examples

- 4. Explain the purpose and use of a "rag doll" seed tester. Use it to test the germination of 100 seeds of a wild plant and 100 seeds of a domestic plant. Report the results of each test.

Purpose _____

Wild plant _____

Domestic plant _____

Test results _____

- 5. How does a seed differ from a spore?

Seed _____

Spore _____

- 6. Write or tell orally two spiritual lessons we may learn from seeds. You will find help in *Christ's Object Lessons* by Ellen G. White, pages 33 to 89.

Lesson 1 _____

Lesson 2 _____

- 7. Make a collection of 60 different kinds of seeds, of which only 15 may be collected from commercial seed packages, the other 45 you are to collect yourself. Label each kind as follows: seed name, date collected, location collected, and collector's name.
- 8. Have in your collection four kinds of seeds from each of two families of plants, showing the similarity between the seeds of plants in any one family.

Date completed _____

Instructor's Signature _____



Shells

1. What is the meaning of the term "mollusk?"

2. Identify from shells or drawings the following:
- | | |
|-----------|------------------|
| a. Mantle | f. Dorsal border |
| b. Foot | g. Apex |
| c. Teeth | h. Operculum |
| d. Ribs | i. Canal |
| e. Valve | |
3. Are all shells found on beaches? _____

Where else are they found? _____

What areas of the world offer the largest variety of shells?

4. Describe the movement of shells from place to place.

5. How do shell animals protect themselves?

6. How are shells made and from what materials are they made?

7. List and explain five uses made of shells by man.
1. _____

 2. _____

 3. _____

 4. _____

 5. _____

8. Explain the terms "univalve" and "bivalve" as applied to shells.
- Univalve _____

- Bivalve _____

9. Name in common terms five different classes of shells and name in your collection a shell for each class.
- | Classes of shells | Shell for each class |
|-------------------|----------------------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |
| 4. _____ | _____ |
| 5. _____ | _____ |

10. Make a collection of 20 different shells, classify them, and tell where each is found and when it came into your possession.

- ❑ 11. What is the source of pearls? _____
What spiritual lessons does the pearl teach us? Read and discuss *Christ's Object Lessons* by Ellen G. White, pages 115 to 118.

Lesson 1 _____

Lesson 2 _____

- ❑ 12. Match the Bible texts that best answers A-J:
- | | |
|--|--|
| a. Water creatures were created on what day? | Leviticus 11:9,10
Acts 16:14 |
| b. The number of water creatures is innumerable. | Isaiah 50:2
Revelation 21:21 |
| c. Water creatures perish out of water. | 1 Timothy 2:9 |
| d. Job considered coral of great value. | Genesis 1:20, 21 |
| e. Solomon was acquainted with marine life. | 1 Kings 4:33 |
| f. Jesus twice used a shell product to teach a spiritual lesson. | Psalms 104:25
Matthew 7:6; 13:45,46 |
| g. A businesswoman was engaged in selling the famous purple dyes secured from the shellfish Mediterranean Murex. | Job 28:18 |
| h. Paul does not support the wearing of pearls. | |
| i. Shell creatures are unfit for food. | |
| j. The twelve gates of Holy City are twelve pearls. | |

Shells, Advanced

- 1. Have the Shell Honor.
- 2. Define the term "mollusca" or "mollusk."

Mollusca _____

Mollusk _____

- 3. Learn the classification terms of mollusks, know the distinguishing characteristics of each, and become acquainted with several species under each class.

	Classifications	Characteristics	Species
1.	_____	_____	_____ _____ _____
2.	_____	_____	_____ _____ _____
3.	_____	_____	_____ _____ _____
4.	_____	_____	_____ _____ _____
5.	_____	_____	_____ _____ _____

- ❑ 4. Distinguish between univalve and bivalve mollusks from the following considerations:
- | | | |
|-----------------|-----------------|----------------------|
| a. Shell | c. Reproduction | e. Securing food |
| b. Mollusk body | d. Movements | f. Self-preservation |

Univalve _____

Bivalve _____

- ❑ 5. Identify from shells or drawings and know the meaning of the following conchological terms:

Valve _____

Apex _____

Aperture _____

Byssus _____

Canal _____

Concentric lines _____

Epidermis _____

Foot _____

Lips _____

Mantel _____

Mother of pearl _____

Operculum _____

Ribs _____

Spines _____

Teeth _____

Whorls _____

- 6. Explain the development of a shell.

How long do mollusks live?

- 7. Give some facts about the life of a strombus pugilis (fighting conch) and explain why this shell is so named.

- 8. Explain the activities of the shipworm.

- 9. What accounts for the distribution of mollusks.

- 10. Name two mollusks that have no shells.

1. _____ 2. _____

- 11. Find answers for the following interesting questions:

- a. How are bivalve and univalve animals fastened to their shells?

Bivalve _____

Univalve _____

- b. How is shell color controlled? _____

- c. What mollusk has four gills? _____

- d. From what sea animal was India ink formerly made? _____

- e. What mollusk spins a silken thread? _____

- f. What shells were used for money by ancient tribes? _____

- g. What shell is considered sacred by the Tibetans? _____

- h. Purple dye of ancient times came from the secretion of what mollusk? _____

- i. What is the source of pearls? _____

How are they formed? _____

12. Name six commercial uses for shells.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

13. Do one of the following:

- a. Personally find and collect 40 species of shells representing the five classifications. List each shell as to the place and date it was found, common name, scientific name, and class.
- b. Make a collection of 50 species of shells you have found, received, or purchased representing the five classifications. List each shell collected as follows: if personally found, give the information called for under letter "a" above; if received or purchased, give the name of the person from whom the shell was received, the habitat of the shell, the date of its acquisition, and its common name, scientific name, and class.



Pathfinder's Name

Shrubs

1. Note three characteristics of shrubs that distinguish them from trees and herbs.
1. _____
2. _____
3. _____
- Why is a grape vine sometimes regarded as a shrub?
- _____
- _____
2. Name three important wild or cultivated food shrubs of your locality.
1. _____ 3. _____
2. _____
- Name a shrub that produces edible nuts. _____
3. Name two cultivated shrubs and two wild shrubs of your locality that produce showy flowers.
- | Cultivated | Wild |
|------------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
4. Do most shrubs blossom in the spring, summer, or autumn? _____
- Name one shrub whose flowers open before the leaves appear.
- _____
5. What parasitic shrub frequently used for indoor decoration grows on the high branches of different kinds of trees?
- _____
6. Give an example of a shrub whose leaves in autumn turn from green to brilliant shades of yellow, orange, or red.
- _____

- 7. Observe some shrub which is in bloom and list as many kinds of insects as you can (at least three) which come to its blossoms for pollen or nectar.

Shrub _____

Insects

- 8. From what shrubs do birds prefer to eat the fruit or seeds?

Name a shrub whose flowers attracts birds. _____

- 9. In what shrubs do birds prefer to build their nests? _____

- 10. Collect, preserve, and correctly identify the flowers, leaves, seeds, seed pods, or twigs with buds of ten wild shrubs.



Pathfinder's Name _____

Small Mammal Pets

- 1. Have the Mammal Honor.
- 2. Keep a small mammal pet for at least six months. (Dogs and cats are not included as small mammal pets.) For a suggested list of pets to choose from, see #5 below.
- 3. Complete one of the following:
 - a. If you currently have a small mammal pet, keep a record of the care for your small mammal for one month. Include in your record when it is watered, fed, and when its cage is cleaned. (Complete Chart #1)
 - b. If you do not currently have a small mammal pet, but you have kept one for at least six months, “babysit” someone else’s small mammal pet for at least one week. Record the care that was required. (Complete Chart #2)
- 4. Give an oral report (at least 3 minutes) on what you have observed about your small mammal pet. Include favorite foods, some of its habits, when it is most active, and favorite story about pet, etc.
- 5. a. Be able to distinguish between the following groups of small mammal pets:

(1) Hamster	(5) Guinea pigs
(2) Gerbils	(6) Chinchillas
(3) Rats	(7) Rabbits
(4) Mice	(8) Ferrets

Note: If the list of domesticated small mammals above are not found in your area you may substitute local domesticated small mammals from your area.

 - b. Describe the basic care for one of the above list and describe one way the care of another one of the list differs from the one you selected.
 - c. Which two of these pets are not rodents?
 - 1. _____
 - 2. _____
- 6. Write a 200 word essay on the history and value of one of the above and what characteristics they have that make them good pets.

- 7. Be able to identify five varieties of hamsters and five varieties of rabbits.

Hamsters

Rabbits

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____

- 8. Why is it not good to make pets out of small mammals taken from the wild?

- 9. Rabies: What is it? _____

How is it spread? _____

Can you get rabies from small mammals? _____

Is it curable? _____

How can you avoid getting it? _____

Which small mammal pets can carry it? _____

- 10. Why should you not handle your small mammal pets when you have a cold?

- ❑ 11. Find in the Bible three references to animals that we now consider to be small mammal pets. According to the Bible, are they considered to be clean or unclean meat?

Bible References	Clean/Unclean
1. _____	_____
2. _____	_____
3. _____	_____

Small Mammal Pets, Chart #1

If you currently have a small mammal pet, keep a record of its care for at least one month.
Include food habits, water needs, cage cleaning, etc.

Day 1	Day 8	Day 15	Day 22	Day 29
Day 2	Day 9	Day 16	Day 23	Day 30
Day 3	Day 10	Day 17	Day 24	Additional Notes:
Day 4	Day 11	Day 18	Day 25	
Day 5	Day 12	Day 19	Day 26	
Day 6	Day 13	Day 20	Day 27	
Day 7	Day 14	Day 21	Day 28	

Small Mammal Pets, Chart #2

If you do not have a small mammal pet now but completed requirement #1 in the past, take care of some one else's small mammal pet for at least one week while they are on vacation, etc., and maintain a record of the required care.

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
Additional Notes:						



Pathfinder's Name

Spiders

- 1. Do one of the following:
 - a. Collect, identify, and preserve at least 16 species of spiders. Place on each specimen bottle a label showing the locality and date of capture and the spider's common or scientific name.
 - b. Make colored drawings or paintings of at least 16 species of spiders, life size or larger and in natural coloring. Label each with its common or scientific name.
 - c. Take color photos of at least 16 species of spiders. Identify each picture as to its locality, date taken and the common or scientific name of the spider.
- 2. What is the largest member of the spider family? _____
- 3. Write or give orally a description (forty words or more) of a spider that has gained notoriety in your region.

- 4. Give three ways in which spiders differ from insects.
 - 1. _____
 - 2. _____
 - 3. _____
- 5. Make a careful drawing of an orb web.
- 6. What other kinds of webs are there besides the orb web?

7. What do spiders eat? _____

Make a list of victims found in spider webs.

8. For what is a spider web useful? _____

9. Find two references in the Bible to spiders and their webs.

1. _____

2. _____

10. What are the chief enemies of spiders? _____

11. How do spiders:
Help us? _____

Hurt us and our property? _____



Pathfinder's Name

Stars

- 1. Answer the following questions:
What is the earth's nearest celestial neighbor? _____
What is its distance from the earth? _____
What governs the tides? _____
What causes an eclipse? _____
What is a shooting star? _____
- 2. Make a diagram showing relative positions and movements of the earth, sun, and moon. Show positions and area events for eclipses of the sun and moon. One may demonstrate by using an orange, walnut, and marble, or similar objects, to show positions and movements of the earth, sun, and moon when there is an eclipse of the sun and when there is an eclipse of the moon.
- 3. Make a diagram of our solar system

Name the planets in order from the sun.

- | | |
|----------|----------|
| 1. _____ | 6. _____ |
| 2. _____ | 7. _____ |
| 3. _____ | 8. _____ |
| 4. _____ | 9. _____ |
| 5. _____ | |

4. How fast does light travel? _____
How far does light travel in a year? _____

5. What is the difference between planets and fixed stars?

Identify in the sky eight fixed stars.

- | | |
|----------|----------|
| 1. _____ | 5. _____ |
| 2. _____ | 6. _____ |
| 3. _____ | 7. _____ |
| 4. _____ | 8. _____ |

6. What is a constellation? _____

Name and point out six.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

Name two constellations visible throughout the year.

- | | |
|----------|----------|
| 1. _____ | 2. _____ |
|----------|----------|

7. For the Northern Hemisphere: draw a chart of the Big Dipper, Cassiopeia, and the North Star. For the Southern Hemisphere: draw a chart of the Southern Cross, Orion and Scorpio.

8. What is the Milky Way? Observe the Milky Way in the night sky.

9. What is the morning star and evening star?
Morning star _____
Evening star _____
Why does it carry both names? _____
Observe the morning and evening star in the sky.

10. Explain zenith and nadir.
Zenith _____
Nadir _____

❑ 11. What is the aurora borealis? _____

What causes it? _____

❑ 12. Discuss the statement made by Ellen G. White in *Early Writings*, page 41, concerning the opening in Orion.

Stars, Advanced

- 1. Have the Star Honor.
- 2. How can you account for the apparent daily motion of the stars?

- 3. What are each of the following:
 - Planet _____
 - _____
 - Meteor _____
 - _____
 - Constellation _____
 - _____
 - Satellite _____
 - _____
 - Meteorite _____
 - _____
 - Fixed star _____
 - _____
 - Comet _____
 - _____
 - Nebula _____
 - _____
 - Sunspot _____
 - _____

Identify personally or from pictures an example of each.

- ❑ 4. Define the following terms:

Celestial sphere _____

Horizon _____

Transit _____

Celestial pole _____

Right ascension _____

Conjunction _____

Celestial equator _____

Declination _____

Ecliptic _____

- ❑ 5. Explain the major difference between a refractor and reflector type of telescope.

Refractor _____

Reflector _____

Describe an equatorial telescope mounting _____

- ❑ 6. Into what colors is sunlight dispersed when passed through a prism?

In what way are colors of stars used to indicate their temperature?

- ❑ 7. What connection is there between the ecliptic and the vernal and autumnal equinoxes?

What dates are usually associated with the equinoxes?

- ❑ 8. Learn the 12 constellations called the signs of the zodiac. Know the history of the signs of the zodiac.

1. _____	7. _____
2. _____	8. _____
3. _____	9. _____
4. _____	10. _____
5. _____	11. _____
6. _____	12. _____

History _____

- ❑ 9. Identify by there name and point out in the sky the constellations that can be seen all night long on a clear night in your hemisphere.

- ❑ 10. Name five constellations that are visible between sunset and midnight in your hemisphere during:
 - a. The summer months.
 - b. The winter months.
- ❑ 11. At what time of year is the constellation Orion best seen? Locate and identify in the sky the three brightest stars of this constellation.
Time of year _____
- ❑ 12. How are the letters of the Greek alphabet used to name stars in a constellation?

Give five illustrations of the use of the letters of the Greek alphabet in naming the stars of a constellation.

Proper name	Constellation name
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

- ❑ 13. Locate the 15 first-magnitude stars as they appear throughout the year.
- ❑ 14. With the use of a diagram, show the relative positions of the earth and moon during high and low tides.

- ❑ 15. Describe the peculiar individual characteristics of the planets in our solar system.

Mercury _____

Venus _____

Earth _____

Mars _____

Jupiter _____

Saturn _____

Uranus _____

Neptune _____

Pluto _____

Which ones cannot be seen without the aid of a telescope?

Which two planets are seen only near the hours of sunrise or sunset?

1. _____ 2. _____

- ❑ 16. Where and in what way does the Bible refer to Orion, the Pleiades, and Arcturus?

	Where	What way
Orion	_____	_____
Pleiades	_____	_____
Arcturus	_____	_____



Pathfinder's Name

Trees

1. Describe the ways in which trees and shrubs differ.

Trees _____

Shrubs _____

2. Collect and identify typical leaves from 15 different species of trees. Spread neatly, press dry, mount, and label in a suitable notebook or on uniform-size sheets of paper.

3. Name two examples each of trees that have been named for:

What they are used for

1. _____

2. _____

The surroundings or environment in which they grow

1. _____

2. _____

Some distinctive feature

1. _____

2. _____

The geographic region in which they live

1. _____

2. _____

Persons who first found and described them

1. _____

2. _____

- ❑ 4. Give the common name and tell the difference between the two great classes of trees.

1. _____ 2. _____

Difference _____

- ❑ 5. Describe the importance of forest conservation in your area.

- ❑ 6. Name several examples of the kinds of wood used in each of the following:

Flooring for houses

1. _____ 3. _____

2. _____ 4. _____

Common plywood

1. _____ 3. _____

2. _____ 4. _____

Furniture

1. _____ 3. _____

2. _____ 4. _____

Ax handles

1. _____ 3. _____

2. _____ 4. _____

Fence posts

1. _____ 3. _____

2. _____ 4. _____

Railroad ties

1. _____ 3. _____

2. _____ 4. _____

Support beams for construction work

1. _____ 3. _____

2. _____ 4. _____

Bows and arrows

1. _____ 3. _____

2. _____ 4. _____

Ideal for use as kindling

1. _____ 3. _____

2. _____ 4. _____

Burns slowly and leaves a bed of hot coals

1. _____ 3. _____

2. _____ 4. _____

7. Name two examples each of trees which:

Grow best in wet lands

1. _____ 2. _____

Grow best at high levels in mountains

1. _____ 2. _____

Trees, Advanced

- 1. Have the Trees Honor.
- 2. Collect, identify, press, and mount leaves of 35 different species of trees.
- 3. Separately collect, press, mount, and label specimens that demonstrate the following terms:
 - a. Serrate
 - b. Doubly serrate
 - c. Entire
 - d. Crenate
 - e. Dentate
 - f. Lobe
 - g. Incise
 - h. Whorled
 - i. Opposite
 - j. Alternate
 - k. Pinnately compound
 - l. Triple compound (if possible)

- 4. Describe the advantages in using the Latin or scientific names.

Of what use are the two parts of a scientific name?

- 5. Name six families of trees in the angiosperm class and three families in the gymnosperm class.

Angiosperm Class

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

Gymnosperm class

- | | |
|----------|----------|
| 1. _____ | 3. _____ |
| 2. _____ | |

6. Know and describe the function of leaves in the life of a tree.

7. Name the families of trees in your area which have opposite leaves.

8. Define the following terms:

Stipule _____

Springwood _____

Petiole _____

Summerwood _____

Blade _____

Annual ring _____

Pitch _____

Cambium _____

Heartwood _____

Xylem _____

Sapwood _____

Phloem _____

☐ 9. What families of trees have:

Thorns _____

Pods _____

Catkins _____

Capsules _____

Winged seeds _____

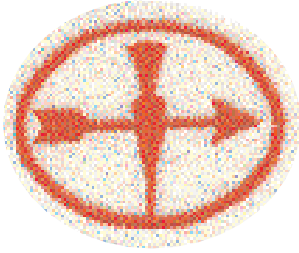
Nuts _____

Acorns _____

Berries _____

☐ 10. Identify ten deciduous trees by their “winter” characteristics, (features other than leaves) such as twig and bud, characteristic form, and growth habits.

Tree	Characteristics
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____
9. _____	_____
10. _____	_____



_____ **Pathfinder's Name**

Weather

1. Explain how each of the following is formed:

Fog _____

Sleet _____

Rain _____

Hail _____

Dew _____

Frost _____

Snow _____

2. Identify either in the sky or from pictures the following types of clouds: cirrus, cumulus, stratus, nimbus. What kind of weather is associated with each.

3. Explain the action of a mercury or spirit thermometer, a mercury barometer, an aneroid barometer, and a rain gauge.

Mercury or spirit thermometer _____

Mercury barometer _____

Aneroid barometer _____

Rain gauge _____

- ❑ 4. Why is it possible to be rainy on one side of the mountain range and dry on the other? Give an illustration for your country or region.

Why is it cooler and more moist in the mountains than in the lowlands?

From which direction do rain and clear weather usually come in your locality?

- ❑ 5. Show with the help of a diagram how the earth's relationship to the sun produces the seasons.

- ❑ 6. What causes lightning and thunder?

What different kinds of lightning are there?

- ❑ 7. Show with the help of a diagram what a convection is.

What is its relation to winds?

- ❑ 8. Explain how radar, satellites, and computers are used in weather forecasting.

Radar _____

Satellites _____

Computers _____

- ❑ 9. Tell how the following can affect our weather:

Jet stream _____

Volcano eruption _____

- 10. Make a drawing showing the water cycle in weather.
- 11. Make a simple wind vane or rain gauge.
- 12. Keep a weather chart for one week and record readings at 12-hour intervals. Include the following: (Complete Chart #1)
 - Temperature
 - Moisture (dew, fog, rain, frost, or snow)
 - Cloud formation
 - Wind direction

Date completed _____

Instructor's Signature _____

Weather, Advanced

- 1. Have the Weather Honor.
- 2. Explain cyclonic and anticyclonic weather conditions and know how they bring about weather changes.

Cyclonic _____

Anticyclonic _____

- 3. What are cold fronts and warm fronts? How do they move and what weather conditions do they produce?

Cold front _____

Warm front _____

- 4. Explain the following weather conditions:

Chinook winds _____

Trade winds _____

Belt of calms _____

Tornadoes _____

Squall line _____

Typhoons _____

Hurricanes _____

Blizzards _____

Ice storm _____

- 5. Explain the action of a registering thermometer, registering barograph, hygrometer, and an anemometer.
 Registering thermometer _____
 Registering barograph _____
 Hygrometer _____
 Anemometer _____
- 6. Correctly read a daily weather map as published by the National Weather Service, explaining the symbols and telling how predictions are made.
- 7. What is meant by relative humidity and dew-point?
 Relative humidity _____
 Dew point _____
- 8. Draw a cross section of the atmosphere, showing its five layers and describe them.

- 9. Keep a daily weather chart for three weeks. Include the following:
 (Complete Chart #1)
 Amount of precipitation (Secure this either from your own home-made device or from official records.)
 Barometer reading
 Cloud formation
 High and low temperature
 Wind speed and direction
 Weather forecasts and comparison to what real happened.
- 10. Discuss the effect of mankind on weather.

Weather, Advanced Chart #1

Instructions

- Keep a daily weather chart for three weeks to include the following:
- | | |
|--------------------------|--|
| Amount of precipitation | Dew or frost in the morning |
| Barometer reading | Wind speed and direction |
| Cloud formation | National Weather Service forecast with
what really happened |
| High and low temperature | |

Use your own observation as well as information obtained from the radio, TV or newspaper.

Week # _____	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
High temperature (Fahrenheit degrees)							
Low temperature (Fahrenheit degrees)							
Current temperature (Fahrenheit degrees)							
Cloud type							
% cloud cover							
Air pressure							
Humidity							
Wind direction							
Wind speed (mph)							
Rain daily (inches)							
Rain total (inches)							
Prediction/ Actual Weather							

Date completed _____

Instructor's Signature _____

**Nature
General Conference
2002 Edition**

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Subsistence Farming	South Pacific Div/Island Ed.



Pathfinder's Name

Agriculture

1. List the components of soil.

Why is soil important to plants?

2. Explain the difference between clay, sand, and loam soils. List three crops that grow well in each.

Clay _____

1. _____ 2. _____ 3. _____

Sand _____

1. _____ 2. _____ 3. _____

Loam _____

1. _____ 2. _____ 3. _____

3. Test the germination of three varieties of seeds, 100 seeds in each variety. Record germination percentage after three, four, and five days.

	Variety #1 Type: _____	Variety #2 Type: _____	Variety #3 Type: _____
Day 3			
Day 4			
Day 5			

- ❑ 4. Explain how plants obtain nutrients and convert them to food.

Explain the differences between primary, secondary, and micronutrients.

Primary _____

Secondary _____

Micronutrients _____

- ❑ 5. Name and identify ten common weeds of your community and tell how to best eliminate them, using cultural or chemical methods.

Weeds

Elimination

1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____

- ❑ 6. Identify six common insect pests or diseases. Tell what plants they usually affect and how to eliminate or prevent their occurrence.

	Pest/Disease	Plants affected	Eliminated
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

- ❑ 7. Locate two sources of agricultural weather information.

1. _____ 3. _____

How is this information helpful to the farmer?

- ❑ 8. Assist in planting, cultivating, and harvesting at least four different crops. Maintain a log of work done and problems encountered from seeding to harvest.

- ❑ 9. Know the purpose of the following:

Plowing _____

Disking _____

Cultivating _____

Irrigation _____

Harvesting _____

10. Name and identify ten common birds of your locality, and state their value to the farmer.

	Birds	Value
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____

11. What is erosion? _____

How can it be prevented? _____

12. Visit your local cooperative extension service and find out how the organization helps the farmer. Write a one-page report of your visit.



Pathfinder's Name

Beekeeping

1. Know a brief history of keeping bees for honey.

2. List at least five uses of each of the following:

Honey

1. _____
2. _____
3. _____
4. _____
5. _____

Beeswax

1. _____
2. _____
3. _____
4. _____
5. _____

Propolis

1. _____
2. _____
3. _____
4. _____
5. _____

3. Name ten foods that would be very difficult to grow if there were no honey bees.

1. _____	6. _____
2. _____	7. _____
3. _____	8. _____
4. _____	9. _____
5. _____	10. _____

4. List the duties of the drone, the worker, and the queen bees.

Drone _____

Worker _____

Queen bee _____

5. Describe how bees build combs.

Why does the comb turn dark with age?

6. What is meant by the following terms:

Movable-frame hive _____

Crossed comb _____

Bee space _____

Swarming _____

7. What is a smoker? _____

What materials make good fuel for a smoker? _____

8. What consideration should be given when choosing a hive location?

9. How are honey bee diseases spread from hive to hive?

10. What is robbing?

Describe a robber bee.

11. Name four ways to help prevent swarming.

1. _____

2. _____

3. _____

4. _____

Why should swarming be prevented?

12. What three requirements must be met for the colony to successfully weather a winter?

1. _____

2. _____

3. _____

13. What is the advantage of using a double-brood chamber system?

14. Carry out the following duties of successful beekeeping:

- a. Spring feed to stimulate brood production
- b. Supering and other swarm prevention techniques
- c. Extract honey and put into jars
- d. Fall feeding and "taking the hive down" to prepare it for the winter months

15. How do you know when a frame is ready to be removed from the hive for extraction?



Pathfinder's Name

Cattle Husbandry

1. Name at least 25 parts of a steer.

1. _____	14. _____
2. _____	15. _____
3. _____	16. _____
4. _____	17. _____
5. _____	18. _____
6. _____	19. _____
7. _____	20. _____
8. _____	21. _____
9. _____	22. _____
10. _____	23. _____
11. _____	24. _____
12. _____	25. _____
13. _____	

2. What are four characteristics of a good heifer?

1. _____
2. _____
3. _____
4. _____

3. What is castration?

What is its purpose?

4. Why is dehorning done?

What age is best for dehorning? _____

5. What is creep feeding? _____

6. When is a calf weaned? _____

7. What are the housing needs of cattle?

8. Why is it best to put feed and water at opposite ends of the pen from each other?

9. Identify live or from pictures three breeds of beef cattle and three breeds of dairy cattle.

Beef Cattle	Dairy Cattle
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

10. What type of feed is required during the following:
First 90 days _____
From 90 to 180 days _____
From 180 days to selling _____

11. How can a heifer be trained to become a gentle cow?

12. Care for one or more calves for a period of six months.



Pathfinder's Name

Dairying

1. Know 25 parts of a dairy cow.

1. _____	14. _____
2. _____	15. _____
3. _____	16. _____
4. _____	17. _____
5. _____	18. _____
6. _____	19. _____
7. _____	20. _____
8. _____	21. _____
9. _____	22. _____
10. _____	23. _____
11. _____	24. _____
12. _____	25. _____
13. _____	

2. What considerations are made when selecting a calf?

3. Know the care, management, and feeding of dairy cows during their following stages: (Complete Chart #1)
- Calves
 - Weaning to six months
 - Six months to fifteen months
 - Fifteen months to springers
 - The dry cow

4. Know the proper feeding techniques for a lactating cow.

5. Know how milk is produced in the cow.

6. Know the steps in milking a cow either by hand or machine.

By hand _____

By machine _____

7. Know eight parts of a milking machine.

1. _____ 5. _____

2. _____ 6. _____

3. _____ 7. _____

4. _____ 8. _____

8. What is mastitis?

What steps can be taken to prevent mastitis?

9. Know five herd health problems, their symptoms, and how to prevent and/or treat them. (Complete Chart #2)

10. Know the meaning of the following terms:

Concentrates _____

Crude protein _____

Cull _____

Dry period _____

Lactating _____

Lactation cycle or period _____

Oxytocin _____

- 11. Explain the pasteurization of milk and the proper care of dairy utensils and appliances.

- 12. Assist with the care and milking of a dairy herd of cows for at least three months.

Date completed _____

Instructor's Signature _____

Dairying, Chart #1

Know the care, management, and feeding of dairy cows during their following stages

	CARE	MANAGEMENT	FEEDING
Calves			
Weaning to 6 months			
6 months to 15 months			
15 months to springers			
Springers			

Dairying, Chart #2

Know the care, management, and feeding of dairy cows during their following stages

	CARE	MANAGEMENT	FEEDING
Calves			
Weaning to 6 months			
6 months to 15 months			
15 months to springers			
Springers			



Pathfinder's Name

Flower Culture

1. Define each of the following
Perennials _____

Annuals _____

Biennials _____

2. Give general instructions for making a hotbed.

What is the difference between a hotbed and a cold frame?

Hotbed _____

Cold frame _____

3. What is drainage?

Of what importance is it?

- 4. Name three plant pests and tell how to control them.

Pests

Control

- | | |
|----------|----------|
| 1. _____ | 1. _____ |
| 2. _____ | 2. _____ |
| 3. _____ | 3. _____ |

- 5. Give instructions for making a window box and tell its use.

Instructions _____

Use _____

- 6. Prepare the soil, fertilize, plant, and grow to maturity three different kinds of annuals.

1. _____
2. _____
3. _____

- 7. Care for two or more perennial flowers growing outdoors for one season by fertilizing, watering, weeding, and treating for pests as needed. Maintain a written record with weekly entries, listing work done. (Complete Chart #1 as many times as needed to complete the growing season)

Perennials grown

1. _____
2. _____

- 8. Which three plant nutrients are most important to flowering plants?

1. _____
2. _____
3. _____

9. Identify three flowering plants adapted to each of the following conditions:

Shade

1. _____
2. _____
3. _____

Dry soil

1. _____
2. _____
3. _____

Full sun

1. _____
2. _____
3. _____

Moist soil

1. _____
2. _____
3. _____

10. What is the purpose of a soil test?

11. Make a picture collection of ten annuals, five perennials, and two biennials. Label and know the name of each from memory.

Flower Culture, Chart #1

Care for two or more perennial flowers growing outdoors for one season by fertilizing, watering, weeding, and treating for pests as needed.

Perennial grown _____

Week # _____

Week # _____

Week # _____

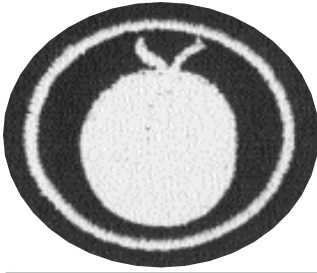
Week # _____

Week # _____

Week # _____

Week # _____

Week # _____



Pathfinder's Name

Fruit Growing

1. Why are fruit trees grafted?

2. What does hardiness mean?

3. What site and soil conditions are required to grow three of the following:

- | | |
|------------|-------------------------|
| a. Apples | e. Cherries |
| b. Peaches | f. Oranges |
| c. Pears | g. An equivalent choice |
| d. Plums | |

	Fruit	Site	Soil
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

4. What is a dwarf fruit tree?

How is it dwarfed?

- 5. Plant at least two fruit trees and train them by pruning for at least two seasons, or train and prune an existing tree. With supervision fertilize and spray as needed for one growing season. Show an example of harvested fruit to your examiner.

Trees cared for

1. _____

2. _____

- 6. Answer the following questions:

What is pollination? _____

What is a pollinator? _____

Which trees need a pollinator? _____

- 7. How are young trees protected from rodent damage?

Protect your young trees from rodents.

- 8. Compare the qualities of flavor, texture, and appearance of two different varieties of the same fruit.

Fruit compared _____

Results _____



Pathfinder's Name

Gardening

1. Prepare soil, fertilize, and plant a vegetable plot of not less than 100 square feet (30.5 square meters). Grow at least six different vegetables, three from seeds and three from seedlings, through harvesting.

Vegetables grown from:

Seeds	1. _____	3. _____
	2. _____	
Seedlings	1. _____	3. _____
	2. _____	

2. List ways to control insects and/or disease in your garden.

Know when and how to apply insecticides and fungicides.

3. What is mulch? _____

How and why is it used in the garden?

How _____

Why _____

4. What is hardiness? _____

Which vegetables are considered hardy in your area?

5. Do one of the following:

- a. Test germination for 100 of the same kind of seeds.
- b. Make and use a hotbed or cold frame.
- c. Prepare any three varieties of vegetables for market.
- d. Make and use a storage bin or pit for your vegetables.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Goat Husbandry

1. Identify live or from pictures at least two breeds of goats. Tell if they are raised for milk, meat, or wool.

Breeds identified

Reason Raised

1. _____

2. _____

2. What type of housing should be provided for goats?

3. What types of feed are used for the following:

First month _____

Second month _____

Pregnancy _____

Freshened doe _____

Yearling _____

4. Name three poisonous plants to goats.

1. _____

2. _____

3. _____

5. When are kids weaned? _____

6. When must the buck kids be removed from the does, and why?

Why _____

7. How are goat's hoofs trimmed?

8. Why are goats good for clearing brush land?

9. Name at least six items that are made from goat skins.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

10. What are wattles? _____

11. Raise at least two goats for six months.

Dates of caring for goats _____

12. If milch goats are raised, answer the following questions:

What are the points to consider when choosing a good milk goat?

How is pasteurization done?

What is its purpose?

13. If milch goats are raised, do the following:

a. Do the milking morning or evening for two goats, or morning and evening for one goat, for at least three months.

Dates goat(s) milked _____

b. Keep daily milk production records.



Pathfinder's Name

Horse Husbandry

1. What line of profit is derived by the use of specially-selected mares?

2. Why is it preferable to raise purebred colts rather than common grades?

3. Name at least five points that are desirable in selecting a horse.
1. _____
 2. _____
 3. _____
 4. _____
 5. _____
4. What type of training will help colts to grow into gentle, dependable horses?

5. Describe the proper care and feeding of horses and give three different types of food for horses.
- Care _____

- Types of food
1. _____
 2. _____
 3. _____

- 6. Know the following:

Halter _____

Bridle _____

Saddle _____

- 7. Know how to properly put a halter, bridle, and saddle on a horse.

- 8. Know how to properly care for the hoofs of a horse.

Know the parts of the hoof.

- 9. Care for a colt or horse for at least one week.

Date of care _____



Pathfinder's Name

Pigeon Raising

1. Describe the proper type of pigeon house or loft, perch, trap, and nest box to use for pigeon raising.

Loft _____

Perch _____

Trap _____

Nest Box _____

List the needed interior equipment for a loft.

2. Know a good formula for seeds, grain, and grit to be used for feed and in what proportions they should be mixed.

Why should less corn be used in warm climates?

3. What is the importance of the different parts of the pigeon's wing, especially the primary and secondary flight feathers?

4. What is the importance of proper molting?

How can the molting season be controlled?

- 5. Raise at least two pairs of pigeons. If homing pigeons, train them to return to their loft from a distance of 25 miles (40 km). If fancy or show pigeons, prepare them for exhibition and exhibit them in a fair or show.

Type(s) of pigeons raised _____

- 6. Submit a brief report, covering your experience in the care and training of the above pigeons, including sanitation, avoiding disease, lice, mites, rats, mice, and other vermin.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Poultry Raising

- 1. Have the Poultry Honor.
- 2. Tell briefly the egg-laying or meat-producing qualities of the following:
 - Plymouth Rock _____

 - Wyandotte _____

 - Rhode Island Red _____

 - Orpington _____

 - Leghorn _____

 - Peking duck _____

 - Mammoth Bronze turkey _____

 - White Holland turkey _____

 - Toulouse goose _____

- 3. What is the purpose of the following:
 - Incubators _____

 - Hovers _____

Sanitary fowl houses _____

Coops _____

Runs _____

- 4. Candle a number of eggs, finding at least one bad egg. What is the purpose of candling eggs?

- 5. Outline the feeding program for domestic fowl, from hatching to maturity.

- 6. What is the temperature, humidity, and number of days needed to hatch the following eggs:

	Temperature	Humidity	# of days
Duck	_____	_____	_____
Chicken	_____	_____	_____
Goose	_____	_____	_____
Quail	_____	_____	_____
Turkey	_____	_____	_____

- 7. Make, buy, or rent an incubator and hatch six poultry eggs of your choice, with a 50% hatch.

Types hatched _____

Date of hatch _____

% of hatch _____

- 8. Raise these fowl for at least three months.

Date of care _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Sheep Husbandry

- 1. What kinds of areas do sheep naturally inhabit?

- 2. What kind of vegetation furnishes the feed most ideal for sheep?

- 3. What type of shelter or barn should be provided for sheep?

- 4. How much space is needed for each animal in the following conditions:
Loose barn space for adult sheep _____
Outside lot space for adult sheep _____
Loose barn space for large lamb _____
Loose barn space for small lamb _____
Pasture required for one ewe _____
Feed trough space for mature sheep _____
Feed trough space for lambs _____
Lambing _____
- 5. What are the most favorable seasons of the year in which to make a start in sheep raising?

- 6. What considerations should be taken into account when selecting the breed of stock?

- 7. What is the ideal size of flock for inexperienced beginners in sheep raising?

8. What winter feed is most ideal for sheep?

9. What type of care should be given to lambs?

10. Know the meaning of the following terms:

Castration _____

Commercial _____

Concentrate _____

Cross bred _____

Dam _____

Dock _____

Drench _____

Ewe _____

Flushing _____

Forages or roughages _____

Gain _____

Gestation _____

Grease weight _____

Heat _____

Lactation _____

Polled _____

Purebred _____

Ram _____

Ration _____

Registered _____

Scours _____

Scurred _____

Sire _____

Wether _____

- 11. Care for two or more lambs until marketed or until three months of age.
Dates of care _____
Number of lambs cared for _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Small Fruit Growing

1. What are the soil requirements for growing
Bramble berries _____
Strawberries _____
Grapes _____
Blueberries _____
2. Write a one-page report telling how to grow one of the above fruits.
Include the following:
- a. Variety selection
 - b. Soil preparation
 - c. Planting techniques
 - d. Fertilizing
 - e. Pruning (where applicable)
 - f. Watering
 - g. Pest control
 - h. Harvesting
3. Name three varieties of each fruit that will grow well in your area.
- 1. _____
 - 2. _____
 - 3. _____
4. Prune two blueberry bushes, two grape vines, or a ten-foot row of
bramble berries at the proper time in the family garden or for a friend or
neighbor.
Type trimmed _____
Who trimmed for _____
5. What is a perishable crop?

- 6. How long can the following be stored?
 Strawberries _____
 Bramble berries _____
 Blueberries _____
 Grapes _____

- 7. Describe a serious insect or disease pest for each fruit. Include when the problem occurs, damage caused, and chemical or cultural treatments. Use as many pictures or drawings as possible. (Complete Chart #1)

- 8. Take a soil test from a garden and determine which fruits will grow there. Ask for fertilizer recommendations for one of the crops and determine the cost of fertilizer needed for six 100-foot (30.5 meters) rows.
 Soil test results _____

 Fruits that will grow _____

 Fertilization recommendation _____

 Cost of fertilizer _____

Small Fruit Growing, Chart #1

Describe a serious insect or disease pest for each fruit. Include when the problem occurs, damage caused, and chemical or cultural treatments. Use as many pictures or drawings as possible.

Type of fruit _____

Describe insect or disease
When did problem occur
Damage caused
Chemical or cultural treatments

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Pathfinder's Name

Adventurer for Christ

To get the full benefit of this honor it is essential that you spend at least six months to a year working on it. You must choose a date to start this honor, and only projects started after this date will apply toward the honor.

Start date _____

- 1. Choose any two of the following and do them consistently for at least six months.
 - a. Read the Junior Morning Devotional book each day.
 - b. Faithfully study your Sabbath School lesson each week.
 - c. Faithfully follow the Jr. Bible Year reading plan.
 - d. Develop a personal prayer diary, listing people and requests you are praying for and answers to prayer.
 - e. Plan and conduct at least one family devotion a week.

- 2. Choose three from the following:
 - a. Send five homemade cards with personal messages, poems, or Bible verses to people who are in need of encouragement.
 - b. Visit ten or more people and invite them to a special church or Pathfinder event.
 - c. Choose a friend and visit someone who was absent from Sabbath School or church. Take them a card and homemade treat. Have a sharing time about this experience with your family and pray for this person.
 - d. For one month keep your bedroom clean, your bed made, and do at least three kindness projects for each parent that show that you love them.
 - e. Collect fifteen left-over Guides and pass them out to absent Sabbath School members, children in hospitals, laundromats, etc.
 - f. Take a cassette recording of your pastor's sermon and special music to a shut-in for three weeks.
 - g. Call you pastor, church elder, or deacon and volunteer to help him with any task he wants you to do for a period of two hours each week for three weeks.

- 3. Choose one of the following and do it with a group.
 - a. Look for yards that need raking, and rake and bag their leaves. In the winter, shovel snow or split firewood. Leave a note and Steps to Christ. Accept no money.

- b. Plan a birthday party with games, presents, and treats at a nursing home for a patient who has a birthday close to yours.
- c. Get the whole family involved in a witnessing project, such as giving Bible studies, passing out Steps to Christ to motels, adopting a needy family, doing a work project for an elderly person.
- d. Read Matthew 25:35-40, then take a walk through your neighborhood and make a list of the needs of your neighbors. (Lonely, grass needs cutting, weeds need pulling, etc.) Go about taking care of as many needs as you can.
- e. Respond to a tragedy in your community by personally getting involved in reaching out to help the people.

Group members

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- ❑ 4. Make up your own adventure, which must involve three different times of two hour each.

Adventure _____

Dates 1. _____
 2. _____
 3. _____

Adventurer for Christ, Advanced

- 1. Have the Adventurer for Christ Honor.
- 2. Complete this honor within nine months to a year. Choose a starting date to begin.
Start date _____
- 3. Choose three activities from Section 1 of the Adventurer for Christ Honor and do them consistently for at least nine months beyond the six months required for the basic Adventurer for Christ Honor.
Activities chosen
 - 1. _____
 - 2. _____
 - 3. _____
- 4. Choose and do one activity (not previously selected) from Section 2 of the basic Adventurer for Christ Honor.
Activity chosen
 - 1. _____
- 5. Choose and do two activities (not previously selected) from Section 3 of the basic Adventurer for Christ Honor.
Activity chosen
 - 1. _____
 - 2. _____

- ❑ 6. Design and do three new adventures (not previously selected) from Section 4 of the basic Adventurer for Christ Honor. All three must involve three different time periods of two hours each.

	Adventures	Dates
1.	_____	_____

2.	_____	_____

3.	_____	_____

Date completed _____
Date completed _____

Instructor's Signature _____
Instructor's Signature _____



Pathfinder's Name

Christian Citizenship

1. Describe the following flags

National _____

State of provincial _____

AY _____

Pathfinder _____

Christian _____

2. Know how to display the national flag with two other flags under the following situations:

Camp out/camporee _____

Fair _____

Pathfinder Day program _____

Parade _____

3. Demonstrate how to fold and salute your national flag. Mention when and how it should be displayed.

- 4. Explain the meaning of and reason for the National Anthem, and recite the words from memory.

Meaning _____

Reason for the National Anthem _____

Words of the National Anthem

- 5. Give the rights and responsibilities of a citizen of your country.

- 6. Have an interview with a local, regional, or national official of your country, and learn about his duties.

Person interviewed _____

Office held _____

Duties held _____

- 7. Write a one-page essay or give a two-minute oral report about a famous person in your country. Mention what he has done to gain his recognition.

Person written about _____

8. Do one of the following:
- a. Make a list of ten famous quotations from leaders of your country.

Leader

Quotation

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

- b. Make a list of ten famous historic places in your country.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

- 7. _____
- 8. _____
- 9. _____
- 10. _____

c. Make a list of ten famous historic events in your country.

Event

Date of event

- | | | |
|-----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |
| 5. | _____ | _____ |
| 6. | _____ | _____ |
| 7. | _____ | _____ |
| 8. | _____ | _____ |
| 9. | _____ | _____ |
| 10. | _____ | _____ |

9. Describe what you can do as a citizen to help your church and country.

10. Go through the steps of an individual acquiring citizenship in the country and learn how this is done.

- 11. Know how to explain the process of government in your country.

- 12. Explain the meaning of this statement Jesus made in Matthew 22:21: "Render therefore unto Caesar the things which are Caesar's, and unto God the things that are God's."

- 13. Explain why laws are established in your country.



Pathfinder's Name

Christian Grooming and Manners

1. What well-balanced combination of strengths did Jesus develop as a growing youth? (Luke 2:52)

2. According to Psalm 8 what estimate does God place on your personal worth?

3. Are names important to God? _____
Does He know your name? (Isaiah 43:1, Exodus 33:17, Isaiah 45:4)

4. Demonstrate or discuss proper conversational skills, including:
The proper way to talk to adults

How to address people and make proper introductions

Questions to avoid

How to think of pleasant things to say

How to show concern for the feelings of others

What to say when you answer the door

How to answer the telephone correctly

- 5. If you want to use your gift of speech to God's glory, what should your prayer be? (Psalm 19:14)

- 6. List seven points showing the power of correct posture.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Check your posture and body profile. Demonstrate how to stand and sit correctly.

Read *Education*, by Ellen G. White, page 198, paragraph 3, and note the benefits mentioned that come to you as a result of correct posture.

- 7. Give two reasons why physical fitness is important.

1. _____
2. _____

Explain the relationship between proper diet, exercise, and weight control.

- 8. Tell the importance of proper grooming, including bathing, body hygiene, breath, proper care of clothes, shoes, etc.

- 9. Describe the proper way to wash your hair and care for your "hair tools."

- 10. Describe the proper care for your hands and fingernails.

- 11. Know the importance of daily "soul-grooming" and of building a Christian character and why "belonging to Christ" makes a difference in the way you dress and act.

- ❑ 12. Discuss scriptural guidelines that will help you cope with your sexuality and keep your thoughts-life clean.

Discuss intelligently the "dos and don'ts" of dating.

- ❑ 13. List four reasons why your face is important to you

1. _____
2. _____
3. _____
4. _____

Show how the way you exercise and sleep can improve your facial appearance.

What relationship do thoughts have to facial "print-out"?

Describe proper facial care.

- ❑ 14. Know the rules of table etiquette which make it easier for you and those around you, such as what to do with your knife and fork after using them.

Know how to be a welcome dinner guest and a joy to your hostess.

- ❑ 15. List ten principles to help you overcome self-consciousness and social embarrassment.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

For Young Ladies

16. Demonstrate two exercises that will improve your posture.

1. _____

2. _____

17. Know how to choose a hairstyle that makes you look your best.

18. Tell the proper style of clothes to wear if you are:

Tall _____

Plump _____

Short _____

Thin _____

Heavy hipline _____

Full bosom _____

19. Demonstrate the correct way to put on a coat or outer wrap.

For Young Men

- 16. Tell how to have well-groomed hair and how to choose a hairstyle that makes you look your best.

- 17. List clothing rules and the proper style of clothes to wear if you are:
tall and thin _____

short and stocky _____

- 18. Tell why Christians should practice good manners.

Demonstrate how to seat a girl or woman at a table and how to properly escort her from home to a social function.



Pathfinder's Name

Christian Storytelling

- 1. Name one source where you have found material for stories for each of the following categories. Tell a story from each category.
(Begin Chart #1)
 - a. Sacred history
 - b. Church history
 - c. Nature
 - d. Character story
 - e. Object lesson with visual aids
- 2. For the above stories you tell, do the following: (Complete Chart #1)
 - a. Tell one of your stories to children, aged five and under, for at least three minutes.
 - b. Tell one of your stories to the 10-12 year olds for at least five minutes.
- 3. Make a written outline of a story you are to tell.

- 4. State how and under what circumstances course material is to be modified for the following:

Telling the story in

first person _____

second person _____

third person _____

Different

audiences _____

ages _____

purposes _____

Making the story shorter _____

Making the story longer _____

5. Tell why a definite aim is necessary in telling a story.

6. Tell one story of foreign missionaries, not less than five minutes in length.

Story title _____

Who told to _____

Length of story _____

7. Tell one story that teaches health principles.

Story title/topic _____

Who told to _____

Date completed _____

Instructor's Signature _____

Christian Storytelling, Chart #1

	Source	Story title	Who told to	Date told	Duration of story
Sacred History					
Church History					
Nature					
Character Story					
Object Lesson with visual Aid					



_____ **Pathfinder's Name**

Cultural Diversity Appreciation

Your national origin _____

Origin of study _____

1. Define culture and cultural diversity.

Culture _____

Cultural diversity _____

2. Define stereotype and identify how you may have stereotyped people in the past.

Stereotype _____

Identify _____

3. Study the following Bible texts and answer the questions.

1 Corinthians 9:20

How does this text explain the importance for a Christian to have a cultural diversity awareness?

Galatians 3:27

What does this text say about all who are in the family of Christ?

Ephesians 2:14

What should be the result of accepting Christ Jesus into our lives?

How do you plan to apply this message to your everyday life?

- ❑ 4. Develop a friendship with a boy, girl or older person from your church, school or community whose cultural background is different from yours and conduct research from the following: library, internet, videos, encyclopedia, etc, about the culture. Arrange an interview with this family and complete the following:
Where did the culture originate? _____

What language is spoken? _____

What religions are prominent in that society? _____

What foods are typically eaten for:

(1) Breakfast _____

(2) Lunch _____

(3) Supper _____

How are eating habits influenced by the food available in that country?

Are there cultural traditions that are different from yours?

What are they? _____

Do people of this culture celebrate the holidays that we celebrate?

What customs do they have for celebrating the different holidays?

What customs or traditions from the original culture have been continued by the family in this country?

Is the dress different from dress in your culture?

Identify at least 5 ways in which you are similar and 5 things which make you different.

Similar

1. _____
2. _____
3. _____
4. _____
5. _____

Different

1. _____
2. _____
3. _____
4. _____
5. _____

Tell how your attitude or feelings towards people of different cultural backgrounds has effected you?

How do you feel about your differences?

Attend church with your friend if it is a different church than yours, or attend a church service of a different cultural group. Identify 3 similarities and 3 differences you observe in the church services.

Similarities

1. _____
2. _____
3. _____

Differences

1. _____
2. _____
3. _____



Pathfinder's Name

Family Life

1. Explain the roles of the father, mother, sister, and brother as given in the Bible and Spirit of Prophecy.

Father _____

Mother _____

Sister _____

Brother _____

2. What is the difference between self-respect and pride?

Self-respect _____

Pride _____

Write a paragraph about some of the things that make you feel good about your family. Include the things you are proud of and your family's good qualities and accomplishments.

- 3. Do one of the following in your home for one week:
 - a. Dust and keep the floors clean
 - b. Wash the clothes
 - c. Wash the dishes
 - d. Properly dispose of garbage
- 4. Care for the younger members of your family or a neighbor's family for at least a couple of hours.

Cared for _____

Length of care _____

- 5. Make a list of some of the things your family spends money on.
- _____
- _____

Explain your responsibility to the finances of your family.

- 6. Make a list of family activities that you think your family would enjoy.
- _____
- _____
- _____

- 7. How would you make a family worship meaningful for preschoolers, juniors, and teens?

Preschoolers _____

Juniors _____

Teens _____

Plan and conduct a family workshop for one of these age groups.

Topic _____

Date of worship _____

Age group selected _____

- 8. Know what to do in the following circumstances in your home:

Accident _____

Bad storm _____

Financial crisis _____

Fire _____

Loss of a relative _____

- 9. Plan and conduct a fire drill in your home.

Date of drill _____

- 10. List five ways you can show concern for or interest in your neighbors.

1. _____

2. _____

3. _____

4. _____

5. _____

- 11. Study the recreational activities of your family. What improvements, if any, can be made?



Parhfinder's Name

Junior Witness

- 1. Be a member of a Pathfinder Club or AY Society.
- 2. Participate in at least five Outreach activities during one year.

Activities

Dates

- | | | |
|----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |
| 5. | _____ | _____ |

- 3. Enroll at least two people in a Bible correspondence course.

People enrolled

- | | |
|----|-------|
| 1. | _____ |
| 2. | _____ |

- 4. Know from memory at least two key texts for each of the following Bible teachings:

Text 1

Text 2

Second coming of Christ	_____	_____
Seventh-day Sabbath	_____	_____
State of the dead	_____	_____
Law and grace	_____	_____
Conversion	_____	_____
Judgment	_____	_____
Inspiration of the Bible	_____	_____
Spirit of Prophecy	_____	_____
The saints' reward	_____	_____

- 5. Give at least two Bible studies, using the open-Bible method, using visual aids, audio or electronic equipment.

Topics

1. _____

2. _____

To whom given _____

Dates given _____

- 6. Make at least 50 one-to-one contacts using outreach literature, ADRA annual solicitation, health/church survey or other one-to-one contact programs.

Literature used _____

Activity _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Junior Youth Leadership

- 1. Be a Master Guide
- 2. Read two books on junior youth leadership written in the last five years.
Books read
 - 1. _____
 - 2. _____
- 3. Serve in any one of the following offices:
 - a. Junior Youth Group leader for one year.
 - b. Junior or Earliteen Sabbath School leader for one year.
 - c. Staff member in an active Pathfinder club for one year.
 - d. Staff member at a summer youth camp for a full summer.
- 4. Prepare a group to be invested in one of the Adventist Youth/Pathfinder classes during the current year and assist in conducting the Investiture service.
Group prepared _____
Class prepared _____
Date of investiture _____
- 5. Know at least ten qualities of a good youth leader.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
 - 7. _____
 - 8. _____
 - 9. _____
 - 10. _____

- 6. Know the difference between juniors (10-12 years old) and teens (13-15 years old) in the following areas:

	Juniors	Teens
Physical	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
Emotional	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
Mental	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>
Spiritual	<hr/> <hr/> <hr/>	<hr/> <hr/> <hr/>

- 7. Know principles in the proper administration of discipline to youth.

Learn the following areas of discipline
Ten ways to prevent having to discipline

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

Nine ways to have balanced discipline

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

Five types of discipline

1. _____
2. _____
3. _____
4. _____
5. _____

Five discipline procedures

1. _____
2. _____
3. _____
4. _____
5. _____



Pathfinder's Name

Language Study

- 1. Read and translate from sight a passage of at least 300 words from a book or magazine in a language not native to you.
Material translated _____
- 2. Carry on a simple but sustained conversation in a modern foreign language for a period of not less than five minutes.
Topic of conversation _____
Length of conversation _____
- 3. Listen to an address or statement of not less than two minutes' duration made by a person to whom the foreign language is a native tongue, and translate the same into your own language.
Person listened to _____
Topic _____
- 4. Write a simple letter in the foreign language of your choice, telling what contacts you have been able to make with persons whose native tongue is the language you have chosen.
- 5. Know and repeat from memory the Pathfinder Pledge and Law in this foreign language.
- 6. Write or tell orally about the foreign population in your vicinity and what opportunity you have to converse with those who speak the language you have studied.

Note: After your choice of a modern foreign language has been made, obtain a suitable textbook in that language and study it thoroughly.

Date completed _____

Instructor's Signature _____

Outreach Ministries
General Conference
2002 Edition



Pathfinder's Name

Literature Evangelism

1. From the Bible and writings of Ellen G. White, write a summary, at least 250 words in length, on the importance of the use of literature in leading people to Christ.

2. Name five essential qualifications of a colporteur.

1. _____
2. _____
3. _____
4. _____
5. _____

3. How is the colporteur supported?

4. What four steps are taken in the sale of a book or magazine?

1. _____
2. _____
3. _____
4. _____

5. Briefly outline how to arouse an interest in purchasing a book or magazine?

6. Know how to meet objections to purchasing a book or magazine.

- ❑ 7. Do one of the following:
- a. Maintain a literature rack for four months, keeping a log of which books are the most and least popular.
 - b. Do a project of house-to-house or mail distribution of literature in your community for ten hours. Include in the literature a response card for additional literature, Bible studies, and/or a Bible correspondence course.
 - c. Engage in selling Seventh-day Adventist books and/or magazines during a period of a least five weeks, or at least 20 hours each.
 - d. Do a project of distributing religious books to local government officials. Spend at least ten hours on your project.
 - e. Do a project of supplying religious literature to patients in a hospital or nursing home. Spend at least ten hours on your project.
 - f. Make a project of supplying a year's subscription to Liberty magazine to the judges and/or lawyers in your community. Raise the money or get contributions for the gift subscriptions.
 - g. Make a project of sending literature and/or Bibles to the mission field. Part of this project is collecting the literature and/or Bibles, determining where to send the material and packaging and sending the material.

Project selected _____

Date completed _____



Pathfinder's Name

Personal Evangelism

- 1. Through Bible and the writings of Ellen G. White study how Jesus treated people on a one-to-one basis. Write a 500-word report or give a five-minute oral report of what you learned.
- 2. Show that you have a personal daily devotional life for at least six months.
- 3. Do two of the following:
 - a. Take part in one of the following:
 - (1) Evangelistic meetings
 - (2) Youth Evangelistic meetings
 - (3) Community service van activities
 - (4) Cooking school seminars
 - (5) Stop Smoking seminars
 - (6) Weight loss seminars
 - (7) Stress management seminars

In your choice of the above, do the following:

- (a) Take part in the organization of the activity.
 - (b) Take part in the setting up of the meeting place.
 - (c) Assist in the advertising.
 - (d) Find out where the finances came from for the outreach project and what expenses were incurred.
 - (e) Be involved in the operation and running of the outreach project on a regular basis.
- b. Assist in the organization and planning of one of the following outreach projects and participate in the project at least ten hours:
 - (1) Community beautification project, such as landscaping or improving a public area
 - (2) Story hour
 - (3) Clown ministry
 - (4) Puppet ministry
 - (5) Prepare Christmas stockings for underprivileged children.
 - (6) Food and/or clothing distribution to the needy.
 - (7) Programs and visits to a nursing home, orphanage, or pediatrics ward of a hospital.
 - (8) Similar project approved by a Master Guide or AY leader.

- c. Do all of the planning and organization and participate at least 15 hours in one of the following outreach projects:
- (1) Free yard care or housework for the elderly
 - (2) Teach in a lower division Sabbath School department.
 - (3) Temperance talks
 - (4) Tutoring of younger students
 - (5) Volunteer work in a hospital or nursing home
 - (6) Supplying books and games to a hospital
 - (7) Help with the rehabilitation of a physically handicapped person
 - (8) Make posters and are projects for a hospital, nursing home, or orphanage.
 - (9) Adopt a Grandparent Program.
 - (10) Similar project approved by a Master Guide, AY or Pathfinder leader.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Sign Language

- 1. Learn the manual alphabet used by the deaf.
- 2. Have a minimum of three hours of instruction in signing.
- 3. Send and receive finger spelling at the rate of five words per minute using a minimum of 25 letters.

Message sent and received _____

- 4. Learn at least 100 signs from one or more of the below referenced books. (Use chart #1)
- 5. Learn and present in sign language (note finger spelling) at least two simple songs.

1. _____

2. _____

- 6. Do one of the following:
 - a. Explain the difference between Ameslam and signed English, and demonstrate the use of both.

Ameslam _____

English _____

- b. Read and give an oral or written report on a school in your country or state specializing in deaf education.

Date completed _____

Instructor's Signature _____

Sign Language, Advanced

- 1. Have the Sign Language Honor.
- 2. Have a minimum of 5 hours of instruction in signing.
- 3. Send and receive finger spelling at a rate of 12 words per minute using a minimum of 50 letters.

Message sent and received _____

- 4. Learn at least 350 signs. (Use chart #1)
- 5. Sign at least 6 songs to a hearing impaired friend.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

- 6. Be able to sign to a hearing impaired friend:
 - a. The Lord's Prayer - Matthew 6:9-13.
 - b. Beatitudes - Matthew 5:3-12.
 - c. Ten Commandments - Exodus 20:6-17.



Pathfinder's Name

Stewardship

1. Discover the Bible principles of stewardship by answering the following questions:

What does 1 Corinthians 6:19-20 say about the stewardship of the body?

What does Matthew 25:15 tell us about the stewardship of talents?

What does Colossians 4:5 say about the stewardship of time?

What does John 3:16 tell us about who owns the earth?

What does Genesis 1:26 say about who is the steward over the earth?

What does Proverbs 3:9 say about who is always first?

How do we know that tithe means a tenth? Genesis 28:22

Who does Leviticus 27:30 say the tithe belongs to?

How does Malachi 3:8 say that God is robbed?

What does 1 Corinthians 9:13,24 say about the use of the tithe?

How do we know that the tithe is different from offerings? Malachi 3:8

What does 1 Corinthians 16:2 say about how we are to give our offerings?

What does Matthew 6:20 say about where to keep our treasures?

What does 2 Corinthians 9:7 say about our attitude in giving?

What promised blessing is given in Malachi 3:10?

What does Psalms 24:1 tell us about who owns the earth?

- ❑ 2. Read and discuss with your counselor or pastor the following:
Section IV (pp. 111 to 130); paragraph 1 and 2, p. 14; and paragraph 1,
p. 66 of *Counsels on Stewardship* written by Ellen G. White.

- ❑ 3. Learn what is done with the tithe in your local church, your local conference, your union, and the General Conference.

Local church _____

Local conference _____

Union _____

General Conference _____

- ❑ 4. From your pastor, church treasurer, or elder learn about your church budget, what finances your church must meet and the purpose of each item listed on your church tithe and offering envelope.

- ❑ 5. Keep a chart on how you spend your time for one weekend and one week day. In this chart make a list of how much time you spend in the following areas: (Complete Chart #1)

- | | |
|-----------------------|-------------------|
| a. Work for pay | j. Sleep |
| b. Family time | k. Personal needs |
| c. Personal devotions | l. Class time |
| d. Public worship | m. School study |
| e. Family worship | n. Travel |
| f. Fun things | o. Music lesson |
| g. Reading | p. Music practice |
| h. Television | q. Home chores |
| i. Meals | r. Shopping |

For each of the three days be sure your time adds up to 24 hours. After completing the chart, discuss with your pastor or counselor your responsibility in the stewardship of your time.

- ❑ 6. Do one of the following: (Complete Chart #2)
 - a. If you have an income-producing job or an allowance, make a list of how you spend your money for one month.
 - b. If you are not in the category above, make a list of how you would spend an income of \$50 a month in the following categories:
 - (1) Clothes
 - (2) Entertainment
 - (3) Eating out
 - (4) Gifts
 - (5) Personal items (toiletries)

- (6) School supplies
- (7) Tithe and offerings
- (8) Transportation

From your list determine what percentage of your total income is spent on each item. After completing the chart and percentages, discuss with your pastor or counselor the advantages of a budget and how to stay within a budget.

- 7. From the Bible and the writings of Ellen G. White determine what instruction has been given concerning the variety and use of God-given talents.

- 8. List three talents or skills that you have, such as building things, mechanics, gardening, painting or drawing, writing, speaking, music, teaching, sewing, etc. Choose one of these three talents and do a project to help develop you talent further. Your project must follow these guidelines:

- a. The project is to be a benefit or outreach to others.
- b. The project is to be a new endeavor not previously accomplished.
- c. Spend at least five hours in the planning and implementation of the project.
- d. Present a written or oral report to your counselor about your project.

Talents/Skills

- 1. _____
- 2. _____
- 3. _____

Project _____



Pathfinder's Name

Temperance

1. Memorize and sign the Temperance Pledge:

“Realizing the importance of healthy body and mind, I promise, with the help of God, to live a Christian life of true temperance in all things and to abstain from the use of tobacco, alcohol, or any other narcotic.”

Your Signature

2. Memorize two of the following Bible texts and two of the following quotations from the writings of Ellen G. White:

Bible Texts

- | | |
|--------------------------|----------------------|
| a. Romans 12:1-2 | d. Proverbs 20:1 |
| b. 1 Corinthians 10:31 | e. Galatians 5:22-23 |
| c. 1 Corinthians 6:19-20 | f. 3 John 2 |

Writings of Ellen G. White

- a. “True temperance teaches us to abstain entirely from that which is injurious, and to use judiciously only healthful and nutritious articles of food.” *Temperance*, p. 3.
- b. “The only safe course is to touch not, taste not, handle not, tea, coffee, wines, tobacco, opium, and alcoholic drinks.” *Counsels on Diet and Foods*, p. 428.
- c. “...temperance alone is the foundation of all the graces that come from God, the foundation of all victories to be gained.” *Temperance*, p. 201.
- d. “A pure and noble life, a life of victory over appetite and lust, is possible to everyone who will unite his weak, wavering, human will to the omnipotent, unwavering will of God.” *Temperance*, p.113.
- e. “Tobacco is a slow, insidious, but most malignant poison, in whatever form it is used, it tells upon the constitution; it is all the more dangerous because its effects are slow and at first hardly perceptible.” *Ministry of Healing*, p. 327-328.

- ❑ 3. Do four of the following: Refer to Adventist Youth for Better Living (AYBL) Manual for details.
 - a. Write and deliver a five-to eight-minute speech (oration).
 - b. Write an essay on alcohol, tobacco, drugs, or physical fitness of 150 to 200 words and your commitment to a healthy lifestyle.
 - c. Write a four-line jingle on a Drug Prevention topic.
 - d. Draw/make a poster 22 x 28 inches (55.9 x 63.5 cm) that tells about the harmful effects of a drug, tobacco, or alcohol.
 - e. Make a substance abuse exhibit for a local shopping mall, library, or school.
 - f. Make a scrapbook of at least 20 pages showing various Drug Prevention advertisements.
 - g. Share with at least five other persons (excluding your immediate relatives) what you have accomplished from the above list and obtain their signed Temperance Pledges.

❑ 4. Know and explain:

- a. The reason behind the warning on the cigarette packet: “Warning—smoking is a health hazard.”

- b. Seven ingredients of tobacco smoke:

Nicotine _____

Arsenic _____

Formaldehyde _____

Carbon monoxide _____

Cyanide _____

Phenolbenzophyrine _____

Amonia _____

c. Know and explain

Emphysema _____

cirrhosis _____

addiction _____

d. Know the effects of during pregnancy

tobacco _____

alcohol _____

drugs _____

- 5.** Read the chapter “Stimulants and Narcotics” in *Ministry of Healing*. Be able to discuss briefly or provide a written summary approximately two or three paragraphs in length.

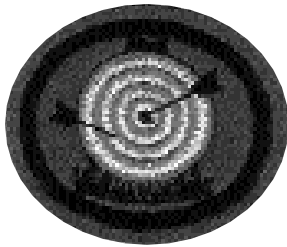
- ❑ 6. After studying the following materials, list three things that contribute to temperance and good health. (Other than abstaining from that which is harmful.)
 - a. *Temperance* page 139 paragraph 1
 - b. *Counsels on Diet and Foods*, page 406 paragraph 1
 - c. *Temperance* page 140 paragraph 2
 - d. *Temperance* page 143 paragraph 3
 - e. *Counsels on Health*, page 127 paragraph 4
 - f. *Temperance* page 148 paragraph 2
 - 1. _____
 - 2. _____
 - 3. _____

- ❑ 7. Discuss the following situations and role-play what you would do if:
 - a. Your best friend asks you to try a cigarette.
 - b. A classmate offers you money to sell marijuana.
 - c. An older relative offers you a drink of beer.
 - d. The smoke from a stranger's cigarette is bothering you.
 - e. A friend asks you to smoke marijuana.
 - f. You are at a party with a friend, he gets drunk and insists on driving you home.

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Pathfinder's Name

Archery

- 1. Identify the parts of a bow.
- 2. Identify the parts of an arrow.
- 3. Name and explain the safety rules for archery.

- 4. Correctly and safely string a bow.
- 5. Describe and show how to use the following:
 - a. Arm guard
 - b. Finger tab or glove
 - c. Quiver
 - d. Bow sling
 - e. String kisser
- 6. Demonstrate the following shooting techniques:
 - a. The stance
 - b. Nocking the arrow
 - c. The draw
 - d. The anchor
 - e. The hold and aim
 - f. The release
 - g. The follow-through
- 7. Why is it necessary to have an arrow "nocking point" properly positioned on the bow string?

- 8. Using a standard (Olympic bow) score one of the following:
 - a. Indoors: 30 arrows (5 rounds) at 70.8 feet (18 meters) score 50 points on a 23.5 inch (60 cm) target.
 - b. Outdoors: 30 arrows (5 rounds) at 98 feet (25 meters) score 170 points on a 48 inch (122 cm) target.
- 9. Know and practice the archery safety rules.

Date completed _____

Instructor's Signature _____

Archery, Advanced

- 1. Have the Archery Honor.
- 2. Explain the advantages to be found by the target archer in making use of the following equipment:

Aluminum shaft target arrows _____

Bow level _____

Bow sight _____

Bow sling _____

Bow square _____

Bow stabilizer(s) _____

Clicker _____

Flexible arrow plate _____

Kisser button _____

Plastic arrow fletching _____

String peep _____

- 3. Explain what is meant by arrow spine.

- 4. Read the following chapters in The National Archery Association Instructor's Manual:
 - a. Problem Correction
 - b. Advanced Shooting
 - c. Bow Tuning

- 5. Using a standard (Olympic bow) score one of the following:
 - a. Indoors: 30 arrows (5 rounds) at 70.8 feet (18 meters)
score 200 points on a 23.6 inch (60 cm) target.
 - b. Outdoors: 30 arrows (5 rounds) at 196.8 feet (50 meters)
score 200 points on 48 inch (122 cm) target.

- 6. Review and practice the archery safety rules.



Pathfinder's Name

Backpacking

1. Discuss with your instructor the meaning of the motto: "Take nothing but pictures and leave nothing but footprints."

2. Know the essentials of proper clothing, shoes, and rain gear to use in backpacking.

Clothing _____

Shoes _____

Rain gear _____

3. Know the principles in selecting a good quality backpack.

In an emergency, what might be used in place of a backpack?

4. Know the essential items to be taken on a backpack trip.

5. What kind of sleeping bag and pad are best for your camping area?

Know at least three kinds of each that are available.

Sleeping Bags

Pads

- | | | |
|----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |

- 6. Know how to pack a pack properly.
- 7. What types of food are best for backpacking?

Visit a grocery store and list the foods found there that are suitable for backpacking. With your instructor:

- a. Prepare a menu for a weekend backpack trip using foods obtained from a grocery store. (Complete Chart #1)
 - b. Learn the techniques of measuring, packaging, and labeling back pack foods for your trip.
 - c. Make a trail snack.
- 8. Know the prevention and symptoms of, and the first aid for: (Complete Chart #2)
 - a. Sunburn
 - b. Blisters
 - c. Frostbite
 - d. Hypothermia
 - e. Heat stroke
 - f. Heat exhaustion
 - g. Snake bite
 - h. Cramps
 - i. Dehydration

- 9. Have a first aid kit in your pack and know how to use it.
- 10. According to your weight, what is the maximum number of pounds you should be allowed to carry?

- 11. Know three ways to find direction without a compass. Demonstrate at least two.
 - 1. _____
 - 2. _____
 - 3. _____

- 12. Show the proper way to put on and take off a backpack alone and with a partner.
- 13. Participate in a weekend backpack trip of at least five miles (8 km) to a site not accessible by a vehicle and cook your own meals.

Campout date _____

Number of miles _____

Date completed _____

Instructor's Signature _____

Backpacking, Chart #1

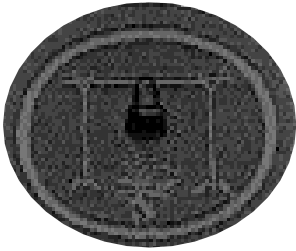
Menu for a weekend backpack trip

Breakfast	Lunch	Supper
		Friday
Saturday	Saturday	Saturday
Sunday	Sunday	

Backpacking, Chart #2

Know the prevention and symptoms of, and the first aid for:

Prevention	Symptoms	First Aid
Sunburn		
Blisters		
Frostbite		
Hypothermia		
Heat Stroke		
Heat Exhaustion		
Snake Bite		
Camps		
Dehydration		



Pathfinder's Name

Campcraft

1. Explain how and why weather, season, and water supply are considered when choosing a campsite.

Weather _____

Season _____

Water _____

Explain what care to take with regard to safe water, sanitary facilities, and emergencies.

Safe Water _____

Sanitary facilities _____

Emergencies _____

2. Prepare a list of clothing you would need for an overnight camp in warm and cold weather.

Warm _____

Cold _____

- 3. Know and practice the safety rules in camping.

- 4. Show your ability to use a camp knife by demonstrating or explaining safety rules for its use and making shavings for tinder.

- 5. Prepare for an overnight camp with a group by making a list of personal items and group items that will be needed. (Complete Chart #1)

- 6. Prepare balanced menus for one cooked breakfast, lunch, and supper. (Complete Chart #2)

- 7. Complete the following while on an overnight camping trip:
 - a. Prepare ground properly for comfortable sleeping.
 - b. Correctly pitch and strike a tent.
 - c. Prepare a proper safe area for a campfire. Show proper use of wood tools in getting and preparing fuel for a fire.
 - d. Show how to protect your camp against animals, insects, and wet or bad weather.
 - e. Show how to take proper care of the environment as you camp and leave the area with no trace of having been there.

- 8. Know eight things to do when lost.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
 - 7. _____
 - 8. _____

- 9. Camp for a continuous three days and two nights, sleeping each night under the stars or in a tent. Be actively involved in cooking at least two of the meals.

Date of campout _____

Meal cooked

1. _____

2. _____

- 10. Considering the things learned in this honor and the camping done, what is the meaning and the reason of the Pathfinder Camping Code?

Meaning _____

Reason _____

Campcraft, Chart #2

Prepare balanced menus for one cooked breakfast, lunch and supper.

Breakfast	
Lunch	
Supper	



Pathfinder's Name

Camping Skills I

- 1. Be at least in the 5th grade.
- 2. Understand and practice wilderness and camping etiquette, regarding preservation of the outdoors.
- 3. Know eight things to do when lost.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
 - 7. _____
 - 8. _____
- 4. Be familiar with various types of sleeping equipment suitable to location and season.

- 5. List personal items needed for a weekend campout. (Complete Chart #1)
- 6. Plan and participate in a weekend camping trip.
Campout date _____
- 7. Know how to properly pitch and strike a tent. Observe fire precautions when tent is in use.

- ❑ 8. Know and practice the proper principles for camp sanitation for both primitive and established campsites.

Primitive _____

Established _____

- ❑ 9. Properly use the knife and hatchet. Know ten safety rules for their use.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

- ❑ 10. Fires:

- a. Demonstrate ability to choose and prepare a fire site.
- b. Know fire safety precautions.

c. Know how to properly strike a match.

d. Practice building a fire with the use of one match, using only natural materials.

Materials used _____

e. Demonstrate how to protect firewood in wet weather.

11. Bake bread on a stick.

12. Describe the proper procedures for washing and keeping clean the cooking and eating utensils.

13. Describe sleeping wear and how to stay warm at night.

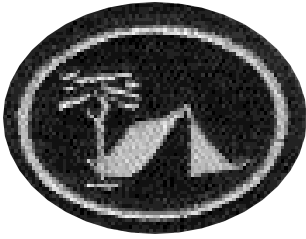
14. Draw a spiritual object lesson from nature on your camping trip.

Lesson _____

15. Explain and practice the motto: "Take only pictures and leave only foot prints."

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Camping Skills II

- 1. Be at least in the 6th grade.
- 2. Develop a personal philosophy of outdoor etiquette, such as courtesy to other campers and outdoor conservation.

- 3. Know and understand the following six W's for the selection of a good campsite:

Water _____

Weather _____

Wild things _____

Willingness _____

Wind _____

Wood _____

- 4. Demonstrate your ability to protect the wilderness and your water source by proper personal hygiene and cooking sanitation.

- 5. Participate in a weekend campout.

Campout date _____

- 6. Take part in a camp worship service to include one of the following:

a. Leading song service

b. Sabbath School lesson study

c. Story

d. Worship thought

- 7. Know how to safely light and use a camp stove and lantern.

- 8. Know safety rules and demonstrate your ability to properly cut fire wood.

Demonstrate how to break dead wood properly.

- 9. Using fuzz sticks or shaved sticks, build and know the use of a council or crisscross fire and one type of cooking fire.

Use

Council _____

Crisscross _____

Cooking _____

Review firebuilding safety rules.

- 10. Explain two ways to keep camp food cool.

1. _____

2. _____

- 11. Build two different camp cranes.

1. _____

2. _____

- ❑ 12. Prepare camp meals using boiling, frying, and baking.

Boiling _____

Frying _____

Baking _____

- ❑ 13. Demonstrate tent site selection.

Properly pitch and strike a tent.

What precautions should be taken when striking a wet tent?

Properly clean, dry, and store a tent.

- ❑ 14. Bedding:

- a. Show proper ways to stuff or roll your sleeping bag or bed roll for travel.

- b. Tell how to keep a sleeping bag or bed roll dry on a camping trip.

- c. Describe how to properly clean your sleeping bag or bed roll.



Pathfinder's Name

Camping Skills III

- 1. Be at least in the 7th grade.
- 2. Review six points in the selection of a good campsite. Review the safety rules of firebuilding.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
- 3. Go on a weekend campout.
- 4. Lay the following three fires and tell their uses:
 - Hunter's fire _____
 - Reflector fire _____
 - Star fire _____
- 5. Know six ways to start a fire without a match. Build a campfire using one of these:
 - a. Compressed air
 - b. Curved glass
 - c. Flint
 - d. Friction
 - e. Metal match
 - f. Spark
- 6. Know how to properly sharpen a hatchet and knife.
 - Hatchet _____
 - _____
 - Knife _____
 - _____
- 7. Cook a one-pot meal using fresh or dried food.
 - Meal _____
 - _____

- 8. Describe the various types of tents and their uses.

Mountaineering _____

Alpine _____

Tube _____

Backpack _____

- 9. How does condensation occur in tents, and how can it be prevented?

- 10. Demonstrate your ability to anchor a tent down, using the taut-line hitch and two half hitches.

- 11. While camping, plan and give a ten-minute devotional or organize and lead a nature or Bible game or lead out in Sabbath School, camp church, or camp vespers.

Activity _____

Date Completed _____

- 12. Properly locate and build one of the following and describe its importance to the individual and the environment:

Camp sink and dishwashing area

Latrine

Shower _____

- ❑ 13. Demonstrate four basic lashings and construct a simple object using these lashings.

1. _____
2. _____
3. _____
4. _____

- ❑ 14. Know how to replace the mantels on a camp lantern.

Demonstrate how to refill gas in a camp lantern and stove.

Know how to maintain the pressure pump on a camp stove in good working order.



Pathfinder's Name

Camping Skills IV

- 1. Be in at least the 8th grade.
- 2. Plan and execute a one-hour Sabbath camping activity other than worship to make the Sabbath a meaningful experience.
Activity _____
- 3. Write a 200-word report or give a two-minute oral presentation on the preservation of the wilderness, discussing etiquette and conservation.
- 4. Plan your menu for a two-day camping trip and estimate the cost.
(Complete Chart #1)
- 5. Participate in two weekend campouts.
Campout dates
1. _____
2. _____
- 6. Start a fire in wet weather, knowing where to get tinder and how to keep your fire going.
Date fire started _____
Where tinder was found _____

How fire was kept going _____

- 7. Know the wood best suited for making a quick, hot fire.

- 8. Know the wood best suited for making coals for cooking.

- 9. Demonstrate how to split firewood.

- 10. Demonstrate the proper care and storage of camp foods and how to build various caches to protect food from animals.
- 11. Prepare a camp dinner with soup, vegetables, entree, and drink, all of which must be cooked.

Menu _____

- 12. Bake your food in a reflector oven.

Menu _____

- 13. Purify water by three different methods.

1. _____
2. _____
3. _____

Camping Skills IV, Chart #1

	Breakfast	Cost Estimate	Lunch	Cost Estimate	Supper	Cost Estimate
Day 1						
Day 2						

Total Estimated Cost: \$ _____



Pathfinder's Name

Canoeing

1. Have the Intermediate level of the Swimming Honor.
2. Demonstrate, first alone and then with a companion, the proper method of:
- | | | | |
|-----|--------------------------------|-------|-----------|
| a. | Entering and launching a canoe | Alone | Companion |
| (1) | From a beach | _____ | _____ |
| (2) | From a landing dock or pier. | _____ | _____ |
| b. | Landing and leaving a canoe | | |
| (1) | On a beach | _____ | _____ |
| (2) | On a landing dock or pier. | _____ | _____ |
3. Accompanied by examining counselor, demonstrate correctly the following strokes:
- Bow
- Reverse half sweep
- Diagonal draw
- Push over
- Half sweep
- Full sweep
- J-stroke
- Combination draw and J-stroke
4. Alone and with a companion in both the bow and stern, paddle a canoe in a straight course for 100 yards (91.4 meters). Turn right about and left about. The paddle should be kept always on the same side of the canoe. Demonstrate two kneeling positions for paddling.
- | | | |
|-------------------------------------|-------|-------|
| Alone: | Bow | Stern |
| Paddle 100 yards in straight course | _____ | _____ |
| Turn right about | _____ | _____ |
| Turn left about | _____ | _____ |
| Keeps paddle on same side of canoe | _____ | _____ |
| Two kneeling positions for paddling | _____ | _____ |

With a companion:	Bow	Stern
Paddle 100 yards in straight course	_____	_____
Turn right about	_____	_____
Turn left about	_____	_____
Keeps paddle on same side of canoe	_____	_____
Two kneeling positions for paddling	_____	_____

- 5. Demonstrate with a canoe the rescue of a companion who has capsized his canoe offshore by:
 - a. Emptying the swamped canoe of water by drawing it upside down across the gunwales of the rescue canoe.
 - b. Launch the rescued canoe again.
 - c. Steady canoe while companion climbs aboard.
- 6. Jump out of a canoe in deep water and get back in again in the proper form without shipping water. (Candidate must be accompanied by life guard in an equipped lifeboat.)
- 7. With clothes on:
 - a. Capsize a canoe in deep water.
 - b. Right canoe and stow paddles and kneeling pad.
 - c. Get in canoe filled with water and paddle with hands or paddle for 25 yards (22.9 meters).
 - d. Disrobe, stow clothes and paddle, go overboard, hold on to bow of canoe with one hand, swim and tow swamped canoe to shore.
 - e. Empty canoe properly and land it. (Candidate must be accompanied by a lifeguard in an equipped lifeboat.)
- 8. Fully satisfy the examiner of a thorough knowledge of safety rules which will make the candidate a safe canoeist and competent to take others out in a canoe. Promise to observe these rules at all times.
 “I solemnly swear that I will observe safe canoeing rules at all times when canoeing, whether alone or with a companion.”

Candidate’s Signature

Date

❑ 9. Explain how to do the following emergency repair work:

a. Repairing a one-inch hole in a canoe

fiberglass _____

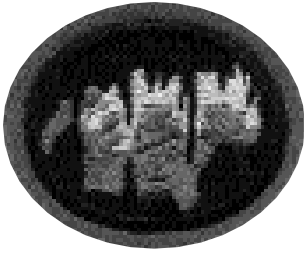
canvas _____

aluminum canoe _____

b. Repairing a broken paddle shaft

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Caving

1. Know at least three light sources for caving.

1. _____

2. _____

3. _____

Know the importance of having extra light supplies and backup lights.

Have an experienced person in caving show you how a carbide light works.

2. List all equipment needed for a successful caving trip excluding vertical equipment and start putting together your own set of equipment.

3. Locate an experienced caver and join that person in exploring at least three relatively easy caves accumulating a total of ten hours of actual caving time.

Caves

Hours completed

1. _____

2. _____

3. _____

Experienced caver _____

4. Keep a log of these explorations, noting date, cave locations, conditions, features, hours spent in each, names of other members in your party and trip leader's name. (Complete Chart #1)

5. Learn, know well and practice caving safety rules.

6. Practice "walking" yourself up a steep slope by pulling yourself along a rope.

7. Describe several ways caves were used in Bible times.

8. Participate in the mapping process of a small cave you have explored.

9. Know the names of at least five different speleotherms and three cave dwelling animals. Include in your report those you have observed while caving.

Speleotherms

1. _____
2. _____
3. _____
4. _____
5. _____

Animals

1. _____

2. _____

3. _____

- 10. Write a report of at least 500 words on ten or more hours of your caving experience and include all you have learned while carrying out the previous nine requirements.

Caving, Chart #1

Date : _____

Number of hours in cave: _____

Cave location: _____

Cave Conditions

Interesting Cave Features

Names of persons in exploring group

Signature of trip leader _____

Caving, Advanced

- 1. Have the Caving Honor.
- 2. Obtain geological survey maps of the area where you go caving. Map out on them the location of all known caves you have explored.
- 3. Be able to give an explanation for:

How these caves were formed _____

What they have in common _____

What can be expected in them in the way of physical characteristics:

Types and extent of formations _____

Effects of prior water activity _____

Presence and nature of fossils _____

Presence and nature of life forms including bats _____

- 4. Obtain proper rappelling equipment and learn how to use it either by studying a book or mountain climbing techniques or locating a person or club group already experienced who are willing to instruct you.

Plan and execute a cave trip where it is necessary to rappel at least forty feet (12 meters) and climb back out.

Date of trip: _____

- 5. Conduct a biological survey of a cave entrance, the cave twilight zone, the deep cave floor, the deep cave wall and the deep cave ceiling. Photograph single specimens of, and identify every form of plant and animal life in each of these troglodytic zones. Compare pictures with nearest natural history museum for help in identification. Publications on cave flora and fauna of the National Speleological Society will help also. Remember slogan, "Take nothing but photographs, leave nothing but footprints."
- 6. Log 100 hours of caving experience. Keep accurate records of each caving trip. (Complete Chart #1)
- 7. Conduct a caving course, to be climaxed by several field trips for a group of young people in your community or church.
- 8. Make friends with at least one cave owner. Determine what he expects of cavers exploring his cave, and do more than he expects you to do in following these directions.

Cave owner _____

Expectations _____

Date completed _____

Instructor's Signature _____

Caving, Advanced, Chart #1

<p>Date : _____</p> <p>Number of hours in cave: _____</p> <p>Cave location: _____</p> <p>_____</p>
<p>Cave Conditions</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Interesting Cave Features</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Names of persons in exploring group</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>Signature of trip leader _____</p>



Pathfinder's Name

Community Water Safety

- 1. Have the Swimming Honor.
- 2. Know the value of disrobing before making a swimming rescue.

Practice disrobing on dry land in 20 seconds or less. Disrobe yourself of your shoes, socks, pants, belt, and shirt. Don't be alarmed-you are allowed a swimming suit underneath!

- 3. Know the value of avoiding contact with a victim

Know the tactics of leading and waiting

Know the value of using equipment in a rescue

- 4. Learn to properly do the following nonswimming rescues:
 - a. Three different kinds of body reaching rescues
 - b. A wading rescue
 - c. Free-floating support rescue
 - d. Three different kinds of throwing assists

- 5. Know the points to be considered in the following when rescuing:

Condition of the victim _____

Condition of the rescuer _____

Condition of the environment _____

- 6. Surface dive in eight feet of water, recovering various objects three times and a ten-pound weight once.
- 7. Swim 100 yards (91.4 meters), using the lifesaving stroke.
- 8. Learn to properly do the following defenses:
 - a. Block
 - b. Block and carry
 - c. Block and turn
- 9. Learn to properly do the following releases and escapes:
 - a. Double-grip-on-one-wrist release
 - b. Escape from double grip on wrist
 - c. Front head-hold release
 - d. Escape from front head hold
 - e. Rear-head-hold release
 - f. Escape from rear head hold
 - g. Double drowning release
- 10. Learn to properly do the following assists:
 - a. Arm assist on front
 - b. Arm assist on back
 - c. Arm assist by two rescuers
 - d. Tired swimmer assist
- 11. Learn to properly do the following approaches:
 - a. Rear approach - armpit level-off
 - b. Rear approach - chin level-off
 - c. Rear approach with two-hand level-off
 - d. Front surface approach
 - e. Underwater approach
 - f. Approach by diving to rear of victim
- 12. Correctly approach 30 feet (9.1 meters) and correctly carry 30 feet (9.1 meters), using the following carries:
 - a. Cross-chest
 - b. Cross-chest control
 - c. Hair
 - d. Wrist
 - e. Shirt or collar
- 13. Complete a minimum of three hours of being instructed in cardiopulmonary resuscitation, or have the CPR Honor.

Date completed _____

Instructor's Signature _____

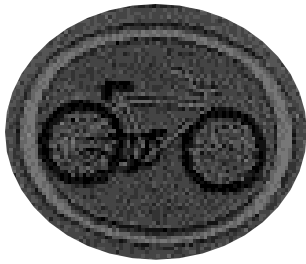
Community Water Safety, Advanced

- Have the Community Water Safety honor.

If residing in the United States or other country in which Red Cross instruction is given, satisfactorily pass the American Red Cross - Water Safety Instructor Aids examination and receive your certificate.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Cycling

1. Know the name and explain the purpose of the various parts of a bicycle.

	Name	Purpose
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____
15.	_____	_____

2. Repair a punctured bicycle tire.
3. Take apart, clean, and properly reassemble a bicycle.
4. Adjust the brakes and front and rear derailleur properly.

- 5. Know and practice courtesy and safety rules in bicycling.

- 6. What is the advantage of wearing a cycling helmet?

- 7. Have the following riding record:
 - a. Take three separate 10-mile (16.1 km) rides in different locations.

	Dates	Locations
1.	_____	_____
2.	_____	_____
3.	_____	_____

- b. Take a 50-mile (80.6 km) ride in ten hours or less.

Date _____

- 8. Know how to read a road map by routing out your 50-mile (80.6 km) course and following it accurately on an actual ride.

Cycling, Advanced

- 1. Have the Cycling Honor.
- 2. Describe how to select the correct frame size, handlebar, assembling, and saddle height to fit one's body size.

Frame Size _____

Handlebar _____

Assembling _____

Saddle Height _____

- 3. Describe briefly all the desirable features of a bicycle used for long distance touring.

- 4. Take apart, clean, and reassemble the bearings in the front and rear wheels, headset, and bottom brackets.
- 5. True a rear wheel, making sure it is properly dished.
- 6. Select the front and rear sprockets combination that would give the best results under the following conditions:

Conditions	Front/Rear sprocket combination
Riding in hilly terrain	_____
Touring with packs on the bicycle	_____
Riding in level country	_____

- 7. Explain how the riding characteristics of a bicycle are affected by:
 - a. The geometry of the bicycle frame including:

Head and seat tube angles _____

Fork rate _____

Chain stay length _____

Bottom bracket height _____

Wheel base length _____

- b. The kind of wheels used including:

Clincher or tubular tires _____

Small or large frame hubs _____

Number of spokes used on each wheel _____

Number of spokes each spoke crosses _____

- 11. Know the different clothing and safety equipment used in bicycling and the advantages of each.

Clothing/Equipment	Advantages
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- 12. Have the following riding record while working on this honor:

- a. Make three single-day 20-mile (30.2 km) rides in different locations.

Dates	Locations
1. _____	_____
2. _____	_____
3. _____	_____

- b. Make a 100-mile (161.3 km) tour, involving three days of riding.

Date _____ Location _____

- 13. Write a 500-word description or give a three-minute oral report of the 100-mile (161.3 km) tour.



Pathfinder's Name

Drilling and Marching

1. Explain five or more objectives of drilling.

1. _____
2. _____
3. _____
4. _____
5. _____

2. Define the following:

Formation _____

File _____

Line _____

Distance _____

Rank _____

Cover _____

Interval _____

Flank _____

Column _____

Cadence _____

3. Explain the actions in each of the following groups:

At Ease, Stand At Ease, and Parade Rest _____

Mark Time, Quick Time, and Double Time _____

Hand Salute and Present Arms _____

Right (Left) Flank and Column Right (Left) _____

4. Properly execute the following basic movements:

<ol style="list-style-type: none"> a. Attention b. Parade Rest c. Stand At Ease d. At Ease e. Dress Right Dress f. Prayer Attention 	<ol style="list-style-type: none"> g. Present Arms h. Order Arms i. Right Face j. Left Face k. About Face l. Fall Out
---	---

5. Properly execute the following movements:
 - a. Mark Time
 - b. Forward March
 - c. Right Flank
 - d. Left Flank
 - e. Column Right (with columns of three or four persons)
 - f. Column Left (with columns of three or four persons)
 - g. Rear March
 - h. Halt

6. Explain and demonstrate how to use, display, fold, and care for the national flag.

Use _____

Display and care _____

How to properly fold _____

Drilling and Marching, Advanced

- 1. Have the Drilling and Marching Honor.
- 2. With a unit guidon, demonstrate the following basic positions:
 - a. Order Guidon
 - b. Carry Guidon
 - c. Salute at Order
 - d. Salute at Carry
 - e. Present Guidon
 - f. Raise Guidon
- 3. Demonstrate how and when to use the guidon's basic position during all drill commands.
- 4. Be a member of an active drill team that has performed at least twice in the past year in a special community, conference, or public activity.

Dates	Events
1. _____	_____
2. _____	_____
- 5. Demonstrate ability to keep in step with the drill team and move as a part of it at all times.
- 6. As a member of a drill team, do four fancy (precision) drill routines, at least one of which includes combination commands.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
- 7. Command a drill team of at least four people, putting the team through basic maneuvers, starting directional commands on the proper foot, and distinguishing between preparatory commands and commands of execution.
- 8. Command an entire Pathfinder Club in at least ten basic drill movements, including Open Ranks.
 - 1. _____
 - 2. _____
 - 3. _____

- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____

- 9. With a unit (or a selected flag guard), formally raise and lower the national flag at a summer camp ceremony, a special Pathfinder meeting, Pathfinder Day program, camporee, or some similar program or ceremony. Also demonstrate posting the national and Pathfinder flag.

Date _____ Event _____



Pathfinder's Name

Fire Building and Camp Cookery

1. Lay five different kinds of fires and know their uses. Two of these fires must be cooking fires.

Fires

Uses

- | | | |
|----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |
| 4. | _____ | _____ |
| 5. | _____ | _____ |

2. Safely make wood shavings or fuzz sticks.
3. Show correct techniques for starting a fire.
4. Start a fire with one match and keep it going for at least ten minutes.
5. Know and practice fire safety rules.

6. Show how to correctly and safely cut and split wood for a fire.
7. Start a fire on a rainy day.
8. Demonstrate the following cooking techniques:
- a. Boiling
 - b. Frying
 - c. Baking bread on a stick
 - d. Aluminum foil baking
 - e. Reflector oven baking
 - f. Simmering
9. Know one method of keeping food cool while camping other than with ice.

- 10. Know ways to keep your food and utensils safe from animals and insects.

- 11. Why is it important to keep your cooking and eating utensils clean?

- 12. Showing knowledge of proper nutrition and food groups, make up a complete and balanced menu for six camping meals. Include the following: (Complete Chart #1)
 - a. A breakfast, lunch, or supper good for a trail hike where light weight is important. The meal should not need cooking but should be nutritious.
 - b. The remaining five meals may be made up of any type of food: canned, fresh, frozen, or dried. One of the five must be a one-pot meal.

- 13. Make up a supply list of items that will be needed to prepare the above six meals. (Complete Chart #2)

- 14. Know how to:

Properly and safely handle food _____

Dispose of trash and garbage _____

Wash your gear _____

Fire Building and Camp Cookery, Chart #1

Breakfast	Lunch	Supper
		Friday
Saturday	Saturday	Saturday
Sunday	Sunday	

Fire Building and Camp Cookery, Chart #2

Supper Friday

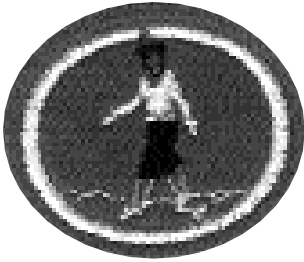
Breakfast Saturday

Lunch Saturday

Supper Saturday

Breakfast Sunday

Lunch Sunday



Pathfinder's Name

Hiking

1. Explain and demonstrate the main points of good hiking practice:

Pacing _____

Speed _____

Resting _____

Etiquette _____

2. Explain the importance and method of proper foot care with regard to:

Cleanliness _____

Care of nail _____

Socks _____

Shoe selection _____

First aid of tender or blistered feet _____

3. Make a list of proper clothing to be worn on a hike in both hot and cool weather.

Hot

Cold

_____	_____
_____	_____
_____	_____

Hot

Cold

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- 4. Make a list of needed gear for a long day hike in the wilderness and a short country hike.

Long day hike _____

Short country hike _____

- 5. List five safety and courtesy rules to be used in wilderness trail hiking and road hiking.

Wilderness

1. _____

2. _____

3. _____

4. _____

5. _____

Trail

1. _____

2. _____

3. _____

4. _____

5. _____

- ❑ 6. Explain the importance of drinking water and list three signs of contaminated water.

Signs of contaminated water

- 1. _____
- 2. _____
- 3. _____

- ❑ 7. Explain the importance of proper eating while hiking.

- ❑ 8. Describe proper clothing and foot gear for cold and hot wet weather hiking.

Clothing

Cold/Wet Weather

Hot/Wet Weather

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Foot Gear

Cold/Wet Weather

Hot/Wet Weather

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- 9. Submit a written plan for a 10-mile (16.1 km) hike which includes: map route, clothing list, equipment list, and water and/or food.
(Complete Chart #1)
- 10. Use a topographical map and/or a road map in planning and doing one of the hikes in Requirement 11.
- 11. Have the following hiking record:
 - a. One five-mile (8 km) rural or town hike
Date _____
Location _____
 - b. One five-mile (8 km) hike on a wilderness trail
Date _____
Location _____
 - c. Two 10-mile (16.1 km) day hikes on different routes
Date _____
Location _____
Date _____
Location _____
 - d. One 15-mile (24.2 km) hike on a wilderness trail
Date _____
Location _____
 - e. Within a month of each hike, write a short report, giving dates, routes covered, weather, and any interesting things you saw.
(Complete Chart #2)

Hiking, Chart #1

Map route	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	
Clothing list	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Equipment list	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Water and/or food	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

Hiking, Chart #2

Date of Hike _____

Routes covered: _____

Weather:

Things of interest

- 3. Demonstrate and explain the purpose of safety equipment while riding and working around horses—riding helmet and boots (or hard soled shoes with a heel).

Helmet _____

Boots _____

- 4. Demonstrate and explain a minimum of 5 rules to safely approach and lead a horse.

1. _____

2. _____

3. _____

4. _____

5. _____

- 5. Demonstrate and explain a minimum of 5 safety rules for working around horses.

1. _____

2. _____

3. _____

4. _____

5. _____

- 6. Demonstrate and explain safe grooming of a horse using the 4 basic tools—mane and tail comb, curry comb, stiff brush, and soft brush.

- 7. Demonstrate a safe mount (including tack check) and dismount.
- 8. Demonstrate a balanced seat while riding at a walk, including circles and reverses.
- 9. Demonstrate and explain start, stop, circles and reverses using the 4 natural aids—legs, hands, voice, and weight.

- 10. Demonstrate and explain 5 trail safety rules, including the following:

Be attentive to leader and alert to danger _____

Use correct spacing _____

Do not let your horse eat along the trail _____

Never move faster than a walk on paved surfaces _____

Always walk your horse when approaching or leaving a group of riders

Use correct position for hills and obstacles _____

- 11. Ride on a trail for a minimum of 3 cumulative hours following all safety rules and using correct position.

Date of ride _____

Horsemanship, Advanced

- 1. Have the Horsemanship Honor.
- 2. Label on an outline drawing of a horse, or point out on a live horse a minimum of 30 different parts of a horse.

- 3. Demonstrate and explain how to care for tack.

- 4. Demonstrate and explain how to catch and halter a horse safely.

- 5. Demonstrate and explain how to tie a horse safely with a manger knot and with a bowline knot using the correct length of rope and trying at the correct height from the ground.

Length of rope _____

Height from ground _____

- 6. Demonstrate and explain how to correctly saddle and bridle a horse and adjust stirrup length.

- 7. Demonstrate the 3 correct positions while riding at a trot/jog including circles and reverses:
 - a. sitting
 - b. standing
 - c. posting.

- 8. Safely demonstrate an emergency dismount.

- 9. Ride on a trail for a total of 7 cumulative hours, following all safety rules and using correct position.

- 10. Demonstrate and explain how to use a hoof pick.

- 11. Demonstrate proper method to turn out a horse.

- 12. Identify a minimum of 8 common horse colors

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

5 common face markings

1. _____
2. _____
3. _____
4. _____
5. _____

5 common leg markings

1. _____
2. _____
3. _____
4. _____
5. _____

13. Demonstrate and explain correct spacing, reversing direction and passing other riders in an arena setting at the walk with at least one other rider, following all safety rules.

Spacing _____

Reversing _____

Passing _____

14. Negotiate a simple three element trail obstacle course set up on level ground riding at a walk. Choose from the following:
- a. Step over log or pole, maximum height of 16 inches (40.6 cm).
 - b. Pass between 2 barrels or bales of hay spaced 45 inches (1.1 meters) apart.
 - c. Zigzag between poles set at 12 foot (3.6 meters) intervals.
 - d. Walk into a large hey-hole, 15 foot (4.6 meters) circle, turn and exit without stepping on or crossing any borderline.

15. Know how to cool down and care for a horse after a demanding ride.



Pathfinder's Name

Kites

1. When were kites first made and flown?

Name at least three ways kites have helped in scientific research and tell how each has affected the world we live in.

Ways Helped

Affect

- | | | |
|----|-------|-------|
| 1. | _____ | _____ |
| 2. | _____ | _____ |
| 3. | _____ | _____ |

Tell the story of Benjamin Franklin and his kite.

2. Name some of the ways that kites might be used today.

3. Explain briefly how kites fly.

- 4. Define the following terms:
 - Spine _____
 - Spar _____
 - Vent _____
 - Bowstring _____
 - Cover _____
 - Frame _____
 - Tail _____
 - Keel _____
 - Flying line _____
 - Bridle _____
 - Reel _____

- 5. What is a common cause of kite failure? _____

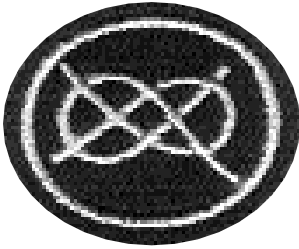
- 6. What should be done when a kite loops during flight? _____

- 7. Why is a tail sometimes needed on a kite? _____

- 8. Know at least three safety rules for kite flying.
 - 1. _____
 - 2. _____
 - 3. _____

- 9. Do the following:
 - a. Correctly wind line on a stick.
 - b. Tie broken ends with the fisherman's knot.

- 10. Make and successfully fly two of the following kites:
 - a. Sled kite
 - b. Flat kite
 - c. Two-stick diamond kite
 - d. Delta wing kite
 - e. Eddy or Malay kite
 - f. Box kite
 - g. Tetrahedral kite



Pathfinder's Name

Knot Tying

1. Define the following terms:
- | | |
|-------------------|-------------|
| a. Bight | f. Turn |
| b. Running end | g. Bend |
| c. Standing part | h. Hitch |
| d. Underhand loop | i. Splice |
| e. Overhand loop | j. Whipping |

2. Know how to care for rope.

3. Describe the difference between laid rope and braided rope and list three uses of each.

Laid	Differences	Uses
_____	_____	_____
_____	_____	_____
_____	_____	_____
Braided		
_____	_____	_____
_____	_____	_____
_____	_____	_____

4. Identify the following types of rope:
- | | |
|-----------|------------------|
| a. Manila | c. Nylon |
| b. Sisal | d. Polypropylene |

5. What are some advantages and disadvantages of synthetic rope?

Advantages _____

Disadvantages _____

- 6. Do the following to rope:
 - a. Splice
 - b. Eye splice
 - c. Back splice
 - d. Finish the end of a rope with a double crown, whipping, or a Matthew Walker's knot.
- 7. Make a six-foot piece of three-strand twisted rope from native materials or twine.

Materials Used _____

- 8. From memory tie at least 20 of the following knots and know their common uses and limitations. Demonstrate how they are used.

- | | |
|-----------------------------------|------------------------|
| ___ Anchor bend | ___ Lark's head |
| ___ Bowline | ___ Man harness knot |
| ___ Bowline on a bight | ___ Miller's knot |
| ___ Butterfly loop knot or Alpine | ___ Packer's knot |
| ___ Butterfly knot | ___ Pipe hitch |
| ___ Carrick bend | ___ Prusik knot |
| ___ Cat's paw | ___ Sheepshank |
| ___ Clove hitch | ___ Sheet bend |
| ___ Constrictor knot | ___ Slip knot |
| ___ Crown knot | ___ Slipped half hitch |
| ___ Double bow | ___ Slipped sheet bend |
| ___ Double sheet bend | ___ Square knot |
| ___ Figure eight | ___ Stevedore's knot |
| ___ Fisherman's bend | ___ Strangle knot |
| ___ Fisherman's loop | ___ Surgeon's knot |
| ___ Halter hitch | ___ Tautline hitch |
| ___ Hunter's bend | ___ Timber hitch |
| ___ Lariat or Bowstring knot | ___ Two half hitches |



Pathfinder's Name

Navigation

- 1. Have the Weather Honor
- 2. Know at least 20 nautical terms used in navigation.

	Term	Meaning
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____
15.	_____	_____
16.	_____	_____
17.	_____	_____
18.	_____	_____
19.	_____	_____
20.	_____	_____

3. Name at least three aids to navigation and their functions. By whom are these maintained?

	Aids	Function	Maintained by
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____

4. Name six types of buoys. What do they mean and how are they used? Give the colors of the six you named. (Complete Chart #1)

How are buoys numbered? _____

How do they mark channels? _____

5. Box a compass with eight cardinal points.

Why is it so important in navigation? _____

Where is it mounted in the vessel, and why? _____

6. Name four of the most useful knots in seamanship. Know how to tie them and give their principal uses.

	Knots	Tie	Uses
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____

7. Familiarize yourself with reading and interpreting a "chart."

Why is a chart so invaluable in unknown waters?

Give some of the things a chart shows.

Give the symbols used on a chart, or two of the most used buoys.

Chart:

Buoys 1:

2:

8. When you are taking an active part in navigation, what are three of the best safety rules to follow?

1. _____

2. _____

3. _____

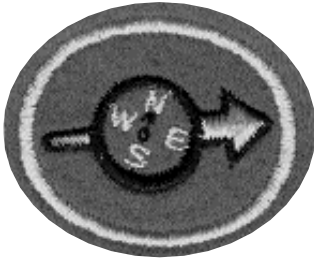
9. What does it mean to be properly equipped?

Illustrate _____

10. What is meant by "rules of the road" and by "proper water etiquette?"

Navigation, Chart #1

	TYPES	MEANING	HOW USED	COLORS
1				
2				
3				
4				
5				
6				



Pathfinder's Name

Orienteering

1. Explain what a topographic map is, what you expect to find on it, and three uses for it.

Explanation _____

Findings _____

Uses 1. _____

2. _____

3. _____

2. Identify at least 20 signs and symbols used on topographic maps.

1. _____ 11. _____

2. _____ 12. _____

3. _____ 13. _____

4. _____ 14. _____

5. _____ 15. _____

6. _____ 16. _____

7. _____ 17. _____

8. _____ 18. _____

9. _____ 19. _____

10. _____ 20. _____

3. Give the nomenclature of an orienteering compass.

- 4. Know the meaning of the following terms:

Elevation _____

Contour interval _____

Magnetic North _____

Declination _____

Scale _____

Measuring _____

Back-azimuth _____

True North _____

Azimuth _____

Distance _____

- 5. Demonstrate how to shoot a magnetic azimuth.

- 6. Demonstrate how to march on a magnetic azimuth.

- 7. Know two methods to correct for declination

1. _____

2. _____

When is correction necessary?

- 8. Be able to orient yourself and a map by inspection and by compass.

- 9. Explain resection and its use.

Use _____

- 10.** Prove your ability in the use of a map and/or a compass by following a one-mile (1.6 km) cross-country course with at least five given readings or control points.

Course location _____

Date _____

Given Readings

1. _____

2. _____

3. _____

4. _____

5. _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Outdoor Leadership

- 1. Have the following honors: Camp Craft and Camping Skills I-III
- 2. Earn four of the following honors. From the list below restudy any previously earned honor so you can give a knowledgeable answer to the requirements.
 - a. Backpacking
 - b. Camping Skills IV
 - c. Fire Building and Camp Cookery
 - d. Hiking
 - e. Orienteering
 - f. Pioneering
 - g. Winter Camping
- 3. Have the First Aid Honor.
- 4. Know what to do to overcome fear when lost.

Know at least four ways to signal for help if lost in the wilderness.

- 1. _____
- 2. _____
- 3. _____
- 4. _____

- 5. Know at least four secular activities and four Sabbath activities to use in an outdoor setting if you have a rainy day.

Secular

- 1. _____
- 2. _____
- 3. _____
- 4. _____

Sabbath

1. _____
2. _____
3. _____
4. _____

6. Do the following in an outdoor setting:
- a. Plan, organize, and do the teaching of one nature honor to a group of youth.

Nature honor: _____

- b. Assist in teaching camping skills required in any camping honor and/or AY Class requirements to a group of youth.

Camping Skills: _____

- c. Determine where the nearest hospital is located.

Location _____

- d. Determine where the nearest assistance from the police or a park ranger can be obtained.

Location _____

7. Through the Bible and/or the writings of Ellen G. White study and learn how the outdoors influenced the following Bible characters:

Moses _____

David _____

Elijah _____

John the Baptist _____

Jesus _____

- ❑ 8. Know what considerations should be given in an outdoor setting with a group of youth in the following areas:

Camping safety _____

Fire safety _____

Sanitation _____

Swimming safety rules _____

Rules for conduct _____

Proper Sabbath observance _____

9. List at least six ways you can keep the out-of-doors beautiful for others to enjoy.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

10. Know at least ten qualities of a good youth leader.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Outdoor Leadership, Advanced

- 1. Have the Outdoor Leadership Honor.
- 2. Earn three honors, not preciously earned, from the Wilderness Master Award.
 - 1. _____
 - 2. _____
 - 3. _____
- 3. Have the First Aid and CPR Honors and a current certificate for them. In addition to these honors, know the prevention and symptoms of, and first aid treatment for the following: (Complete Chart #1)
 - a. Hypothermia
 - b. Venomous snake bite
 - c. Heat and sun stroke
 - d. Heat exhaustion
 - e. Poison ivy & poison oak reaction
 - f. Open wound infection
 - g. Altitude sickness
 - h. Dehydration
- 4. Prepare outlines and present seven different worships to be shared during a camping experience. Utilize scriptural texts and principles, and illustrate these with examples available during the camping experience.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
 - 7. _____

- 5. Outline a personal testimony that could be used to start a friendship between a person and Christ. The testimony could include how Jesus became your personal Savior, a miracle that has happened in your life, etc. Present this testimony to a group of youth in an outdoor setting.

Date _____

Setting _____

Topic _____

- 6. Know how to control the panic of someone who is lost.

- 7. Develop a search and rescue plan for a specific location, 50 acres (hectars) or more, in your area. This plan should utilize at least ten individuals, and you should coordinate each one's activity and search zone. List specific equipment that might be needed for communication, first aid, and victim transport appropriate for the chosen location. (Complete worksheet #1)

- 8. Outline your philosophy for wilderness etiquette. Participate in one to three hours of a wilderness conservation project.

Date of participation _____

Hours spent in participation _____

- 9. Teach at least one honor found in the Wilderness Master group.

Honor(s) _____

- 10. Know at least four objectives for outdoor leadership in each of the following categories:

Physical

1. _____

2. _____

3. _____

4. _____

Social

1. _____

2. _____

3. _____

4. _____

Personal

1. _____

2. _____

3. _____

4. _____

Spiritual

1. _____

2. _____

3. _____

4. _____

- 11. Know the difference between juniors (10-12 years old) and teens (13-15 years old) in the following areas:

Juniors

Teens

Physical

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Emotional

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Mental

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Spiritual

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

- ❑ 12. Have seven of the following honors. Any of the honors earned more than two years ago should be restudied so that you can answer any of the knowledge questions included in the honor.
 - a. Animal Tracking
 - b. Birds
 - c. Ecology
 - d. Edible Wild Plants
 - e. Ferns
 - f. Flowers
 - g. Fungi
 - h. Geology
 - i. Grasses
 - j. Insects
 - k. Mammals
 - l. Marine Invertebrates
 - m. Reptiles
 - n. Rocks and Minerals
 - o. Shells
 - p. Spiders
 - q. Stars
 - r. Trees
 - s. Weather

- ❑ 13. Plan, organize, and carry out one of the following for one weekend with a group of not less than five:
 - a. Outdoor spiritual retreat
 - b. Canoe trip
 - c. Bicycle trip
 - d. Horseback trip
 - e. Backpack trip

Date of activity _____

Location of Activity _____

Group Members

1. _____
2. _____
3. _____
4. _____
5. _____

Outdoor Leadership, Advanced Chart #1

Know the prevention, symptoms of and the first aid for:

Prevention	Symptoms of	First Aid
Hypothermia		
Venomous snake bite		
Heat & Sun stroke		
Heat exhaustion		
Poison Ivy & Poison oak reaction		
Open Wound Infection		
Altitude sickness		
Dehydration		

Outdoor Leadership, Advanced Worksheet #1

Location _____		
Individuals <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	Activites <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	Search Zone <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
Communication	Equipment	
First Aid		
Victim Transportation		



Pathfinder's Name

Physical Fitness

1. List ten benefits of being physically fit.
1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____
2. Know how the following help to achieve a balance for your body:
- Exercise _____
- _____
- Proper eating _____
- _____
- Emotional stability _____
- _____
3. Define the following exercises:
- Isometric _____
- _____
- Isotonic _____
- _____
- Isokinetic _____
- _____

Anaerobic _____

Aerobic _____

- 4. Know the meaning of the principles involved in the following exercise program:

Warm up _____

Aerobic exercises _____

Cool down _____

Calisthenics _____

- 5. Know how to determine your heart rate at rest and after exercise.

At rest _____

After exercise _____

- 6. Know how to determine the minimum rate at which your heart should be beating to obtain the best aerobic conditioning effect.

- 7. Using the four steps given in requirement 4, do a regular exercise program at least four times a week for three months. Keep a chart of the following: (Complete Chart #1)

- a. Type of warm-up exercises performed
- b. Type of aerobic exercises performed
- c. How long aerobic exercises were performed
- d. Type of calisthenics performed

For each exercise period, maintain the minimum heart rate determined in requirement 7 for a period of at least 20 minutes.

Physical Fitness, Chart #1

Month: _____

Record a regular exercise program for a least 4 times a week for 3 months

	1st Week				2nd Week				3rd Week				4th Week			
Type of warm up exercises																
Type of aerobic exercises																
How long aerobic exercises performed?																
Heart Rate																
Type of calisthenics exercises																



Pathfinder's Name

Pioneering

1. Describe in writing, orally, or with pictures how the early pioneers met the following basic living needs:

Housing and furnishings _____

Clothing _____

Food _____

Cooking _____

Warmth and light _____

Tools and handiwork _____

Sanitation _____

Transportation _____

- 2. Construct a piece of useful furniture by lashing. Learn the following lashings:

Square
Diagonal
Sheer
Continuous

Furniture made: _____

- 3. Do one of the following:
 - a. Weave a basket using natural materials.
 - b. Make a pair of leather moccasins.
 - c. Make a lady's bonnet by hand sewing.
 - d. Make a simple toy used by the pioneers.

- 4. Know how to make flour from at least one wild plant for use in baking.

Plant(s) used _____

How made _____

- 5. Build a fire without matches. Use natural fire building materials. Keep the fire going for five minutes. You may use the following to start your fire:

- a. Flint and steel
- b. Friction
- c. Electric spark
- d. Curved glass
- e. Metal match
- f. Compressed air

Method used _____

Materials used _____

- 6. Show axmanship knowledge in the following:

a. Describe the best types of axes _____

b. Show how to sharpen an ax properly

c. Know and practice safety rules in the use of an ax.

d. Know the proper way to use an ax.

e. Properly cut in two a log at least eight inches (20.3 cm) thick.

f. Properly split wood that is at least eight inches (20.3 cm) in diameter and one foot (30.5 cm) long.

☐ 7. Do two of the following:

a. Make a ten-foot (3.0 meters) rope from natural material or twine.

b. Tie ten knots useful to the pioneer and tell how they were used.

Knots

How Used

1.	<hr/>	<hr/>
2.	<hr/>	<hr/>
3.	<hr/>	<hr/>
4.	<hr/>	<hr/>
5.	<hr/>	<hr/>
6.	<hr/>	<hr/>
7.	<hr/>	<hr/>
8.	<hr/>	<hr/>
9.	<hr/>	<hr/>
10.	<hr/>	<hr/>

c. Using rope and natural materials, make one device for moving heavy objects.

Material Used

d. Construct an adequate and comfortable latrine.

Material Used

- 8. Explain the need for proper sanitation relating to solid and human waste and the washing of body, clothes and dishes.

Solid and human waste _____

Washing of body, clothes and dishes _____

- 9. Assist in the construction of a ten-foot (3.0 meters) long log or rope bridge, using lashings.

- 10. Know four ways to keep the wilderness beautiful.

1. _____

2. _____

3. _____

4. _____

- 11. Do two of the following:

a. Make a wax candle or other form of pioneer light source.

b. Make a batch of soap.

c. Milk a cow.

d. Churn butter.

e. Make a quill pen and write with it.

f. Make a corn husk doll.

g. Assist in making a quilt.

- 12. Know five home remedies from wild plants and explain their uses.

	Remedy	Wild Plants	Uses
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____

- ❑ 13. Do one of the following:
- a. Assist in constructing a raft, using lashings. Take a five-mile (8.3 km) trip on a river with this raft.
 - b. With an experienced wrangler, participate in a two-day, 15-mile (25 km) horseback trip, carrying all needed supplies on a pack horse you have learned to pack.
 - c. With an experienced leader, participate in a two-day, 15-mile (25 km) canoe trip, carrying all needed supplies properly. A short portage should be done.
 - d. With an experienced leader, participate in a two-day, 15-mile (25 km) backpack trip, carrying all needed supplies.

Type of trip _____

Date of trip _____

Location of trip _____

Leader/wrangler _____



Pathfinder's Name

Rock Climbing

1. Know and practice the safety precautions that should be followed while rock climbing.

2. Be familiar with and demonstrate the use of the following equipment:
carabiners _____

pitons (various types) _____

jam nuts (various types) _____

runners _____

nylon climbing rope _____

3. Show how to care for and coil the climbing rope. Know how to tie and use the following knots: bowline on a coil, bowline on a bight, figure eight, ring bend, double fisherman's, and prussik.

	Tied	Uses
Bowline on a coil	_____	_____
Bowline on a bight	_____	_____
Figure Eight	_____	_____
Ring Bend	_____	_____

Double fisherman's _____
Prussik _____

- 4. Know when to rope up into a rope team and type of rope team movement for class three, four, and five climbing.

Know when to rope up _____

Type of movement for:

Class three _____

Class four _____

Class five _____

- 5. Describe the six different classes of climbing and methods of rating climbs.

Classes of climbing

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Methods of rating

- 6. Show how to static belay by belaying two climbers up in actual climbing. Show knowledge of proper body positions, braking surfaces, bracing and anchoring, and taking in the rope during the use of static belaying.
- 7. Know and use the following climbing signals
 - belay on _____
 - climbing _____
 - climb _____
 - up rope _____
 - slack _____
 - tension _____
 - falling _____
 - rock _____
 - off belay _____
 - belay off _____
 - belay to point _____
- 8. Using prussik knots and slings, ascend 25 feet (7.62 meters) of vertical rope. Show how to use mechanical ascending devices such as jumars, Gibbs ascenders, etc.
- 9. Properly free climb up to 5.3 (F3) difficulty on two different pitches a distance of at least 50 feet (15.24 meters) with an upper belay. Understand and practice the following free climbing concepts: rhythm, looking ahead, weight over the feet, balance climbing, counterforce climbing, and jamming.
- 10. Show how to set up a rappel. Rappel using figure eights or other mechanical brake methods. Do at least two 50-foot (15.24 meters) rappels.

Rock Climbing, Advanced

- 1. Have the Rock Climbing Honor.
- 2. Know and demonstrate the use of all special rock climbing equipment, such as bongs, RURP's, knifeblades, bolt equipment, hero loops, runners, etriers, and mechanical ascenders.

Bongs _____

RURP's _____

Knifeblades _____

Bolt equipment _____

Hero loops _____

Runners _____

Etriers _____

Mechanical ascenders _____

- 3. Show how to use all free climbing moves, including: foot edging; finger-tip clings; lay backs; hand, arm, foot, and leg jamming; and stemming while climbing at 5.6 (F6) difficulty on practice cliffs using an upper belay.
- 4. Show how to belay properly and safely a lead climber. Show that you can catch a falling lead climber during a practice fall.
- 5. Show how to lead and follow (by jumaring) a continuous Class 5 point 6 direct aid pitch of A2 difficulty of at least 20 feet (6.1 meters).
- 6. Show how to raise and lower, using only normal climbing equipment, an injured climber safely and relatively comfortably. Construct a rope litter and demonstrate its proper use.
- 7. Participate in at least two multi-pitch climbs of 5.5 (F5) difficulty or above, involving at least 120 feet (36.6 meters) of climbing each and leading at least two of the pitches.

Dates of climbs

1. _____

2. _____

- 8. Select a minimum of bivouac equipment, including food for a supper and breakfast, and spend one night bivouacked on a rock ledge at least 30 feet (9.1 meters) high and reached by moderate climbing, hauling equipment up by proper rope hauling methods.

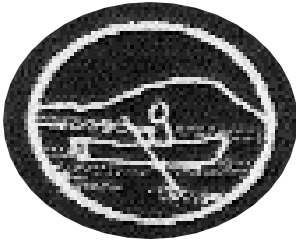
Equipment selected _____

Date completed _____

- 9. Demonstrate basic map and compass use. Explain how the map can be useful to the rock climber and how to determine compass bearing from the map.

Explanation of usefulness _____

How to determine compass bearing _____



Pathfinder's Name

Rowing

- 1. Have the Intermediate Swimming Honor.
- 2. With your instructor or counselor in stern, and without assistance, row properly the following:
 - a. A quarter of a mile on a straight course, stop, make a pivot turn, and return to the starting point.
 - b. Back water in a straight line 200 yards (182.9 meters). Make a turn under way, still backing water, and return to the starting point. (Feather after each stroke. Pin rowlocks must not be used.)
- 3. Demonstrate the following:
 - a. Properly launch and land a rowboat from and to shore.
 - b. Safely assist a person to and from a rowboat alongside a pier.
 - c. Tie a rowboat to a pier using each of the following:
 - (1) Clove hitch
 - (2) Round turn
 - (3) Two half hitches
 - (4) Bowline
 - (5) Hitching tie or mooring hitch
- 4. Alone, or with the assistance of a person who is a swimmer, swamp rowboat, turn it right side up, get in, and with your hands or an oar, paddle it for 30 feet (9.1 meters). Tell why you should hang onto or get into a swamped rowboat.

- 5. Shove off from shore or pier alone in a rowboat, approach a swimmer, and maneuver so that the swimmer can be safely towed ashore.
- 6. Identify and describe:

Dory _____

Dory skiff _____

Dinghy _____

Punt _____

Pram _____

- _____
7. Identify and describe:

Tholepin rowlock _____

Box rowlock _____

Ring rowlock _____

Open top rowlock _____

Tell why pin-type rowlocks are not recommended.

- _____
8. What is the advantage of feathering oars while rowing?

- _____
9. How would you handle a rowboat in a sudden storm or high wind?

- _____
10. How would you calculate the weight that can be safely carried under normal conditions in any given boat under oars?

11. What lights are required on a rowboat at night, both with and without outboard motor?

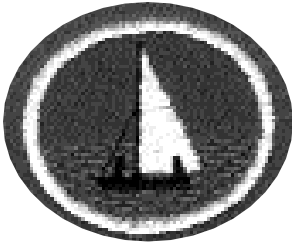
With outboard motor _____

Without outboard motor _____

12. Know how to properly fit out a rowboat, and maintain and care for it during the boating season. Know how to prepare and store the rowboat when not in use.

Fit out a rowboat _____

Store a rowboat _____



Pathfinder's Name

Sailing

- 1. Have the Intermediate Swimming Honor.
- 2. Know the "rules of the road" for boating.

- 3. Know how weather conditions and high wave conditions can affect safety and sailing performance.

- 4. What safety precautions should be followed when sailing?

- 5. With the help of a friend, do the following:
 - a. Get a sailboat underway from a dock, mooring, or beach.
 - b. Properly adjust sails for the following conditions:
 - (1) Beating the wind
 - (2) Beam reach
 - (3) Broad reach
 - (4) Close reach
 - (5) Downwind
 - c. Change tack by coming about and by jibing.
 - d. Return the sailboat to a dock, mooring, or beach, and prepare it for being unattended.

- ❑ 6. Know how to tie and use the following knots in sailing:

Square _____

Bowline _____

Clove hitch _____

Figure-eight _____

Two half-hitches _____

Mooring hitch _____

- ❑ 7. List ways to care for your sailing equipment throughout the year.

- ❑ 8. Have a knowledge of at least 20 terms used in sailing and their meanings.

	Terms	Meaning
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____

- 15. _____
- 16. _____
- 17. _____
- 18. _____
- 19. _____
- 20. _____

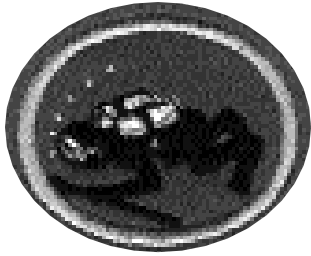
9. Identify at least 15 parts of a sailboat.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____
- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____

10. Demonstrate the rescue of a person overboard.*

11. Demonstrate what to do when a sailboat capsizes.*

Note: * These requirements should be done under the supervision of an adult, with a rescue boat, to give assistance if needed.



Pathfinder's Name

Scuba Diving

(Instructor Required)

Satisfactorily pass a standard SCUBA diving course taught by a certified SCUBA diving instructor.

Date completed _____

Instructor's Signature _____

Scuba Diving, Advanced

(Instructor Required)

- 1. Have the Scuba Diving Honor.
- 2. Satisfactorily pass an advanced SCUBA diving course taught by a certified SCUBA diving instructor.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Skiing, Downhill

1. Know the advantages and disadvantages of metal and fiberglass skis.

Advantages

Disadvantages

Metal

Fiberglass

2. How does the sidecut of the skis help the skier turn?

3. What general rules would you use in selecting the proper length of skis and poles for yourself?

Skies _____

Poles _____

4. Know boot designs and how these features can affect your skiing.

- 5. Why is proper binding adjustment so important?

What determines proper adjustment?

- 6. Know what a safety strap or ski break is and explain its purpose.

Purpose _____

- 7. What should you do if you come upon an injured skier who has not yet received any help?

- 8. Discuss and practice good sportsmanship at ski areas.

- 9. What care should be given ski equipment after its use?

What should be done with ski equipment before its use each season?

- ❑ 10. Ski intermediate slopes under control and execute turns in good form.
- ❑ 11. Know how to get on and off a chairlift, T bar, or J bar correctly and demonstrate through experience, without endangering yourself or others, your ability to ride this equipment.
 - a. Chairlift
 - b. T bar
 - c. J bar

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Skin Diving

- 1. Have the Intermediate Swimming Honor.
- 2. Name three prerequisites for a person who wishes to engage in skin diving.
 - 1. _____
 - 2. _____
 - 3. _____
- 3. What equipment is essential for skin diving?

- 4. Know the effect of the following factors on skin diving:
Types of beaches _____

Surfs and currents _____

Marine life _____

- 5. What are the rules of good sportsmanship in skin diving?

- 6. What safety precautions should be followed while skin diving?

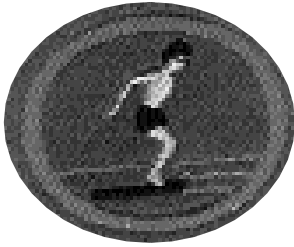
- 7. Describe the skills involved in

Communications _____

Hyperventilation prevention _____

Mask clearing _____

- 8. Demonstrate a practical test in waist-deep water and a qualifying dive in open water.



Pathfinder's Name

Springboard Diving

- 1. Have the Advanced Beginners Swimming Honor.
- 2. Demonstrate properly the following dives: *
 - a. Swan
 - b. Front somersault (tuck)
 - c. Half twist
- 3. Demonstrate properly two of the following dives: *
 - a. Half twist
 - b. Cutaway
 - c. Somersault front one and one-half
 - d. Back dive
 - e. Back jackknife
 - f. Half gainer (tuck, pike, or layout)

- 4. State the safety depths of water under:

One-meter board _____

Three-meter board _____

Tower _____

How far should the board project over the pool?

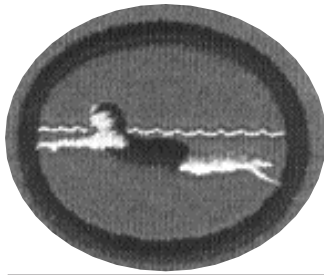
What boards are recommended?

Note: * Basis of Judging: Attention position for running dives; attention position on end of board for standing dives based on the following:

- a. Approach
- b. Spring
- c. Way body is carried through the air (layout, tuck, or pike)
- d. Entry into water

Date completed _____

Instructor's Signature _____



Pathfinder's Name _____

Swimming—Beginner's

Receive the American Red Cross Level III Stroke Readiness or YMCA certificate or equivalent in Swimming—Beginner's OR pass the following requirements:

- 1. **Breath Holding.** Face fully submerged, breath to be held at least ten seconds.
- 2. **Rhythmic Breathing.** Alternately inhale through the mouth above the surface and exhale through the mouth and nose, with head completely submerged, ten times rhythmically and continuously.
- 3. **Prone Float.** In waist-deep water lie face down on the water and return to standing position without assistance or support.
- 4. **Prone Glide.** Push off face down in waist-deep water, take a prone position, glide a distance of at least two body lengths, and recover to a standing position.
- 5. **Supine Float.** Assume a supine floating position face up in waist-deep water, hold the position with the face above water for at least ten seconds, and return to a standing position unaided.
- 6. **Supine Glide.** From a position in waist-deep water, with arms at sides, sit back, push off, glide a distance of at least one body length, and resume standing position in a confident and easy manner.
- 7. **Kick Glide on the Front.** In waist-deep water push off in prone gliding position, pick up the beginner's leg stroke in a smooth and unhurried manner, and kick a distance of three body lengths before resuming standing position.
- 8. **Kick Glide on the Back.** In waist-deep water take a supine gliding position, using the beginner's leg stroke while supine for a distance of three body lengths, and recover to standing position with ease.
- 9. **Arm Stroke.** (Human Stroke or Dog Paddle) In waist-deep water assume a prone position with face buried and, with legs trailing or kicking gently, do the arm stroke in series, pull and recover the arms, and make progress thereby.
- 10. **Arm Stroke Supine.** In waist-deep water start back glide, then propel self using "fin" method.
- 11. **Combine Stroke on the Front.** In water of standing depth swim a coordinated beginner's stroke continuously for a distance of 20 to 25 yards (18.3 to 22.9 meters).

- ❑ 12. Combine Stroke on the Back. In water of standing depth swim a minimum distance of ten yards comfortably and somewhat easily using finning and the beginner's flutter kick in combination.
- ❑ 13. Change of Direction. In water of standing depth start swimming the beginner's stroke prone and, in stroke, make an abrupt right angle turn. Repeat the test, making a turn to the left. Finally, demonstrate ability to make a complete turn.
- ❑ 14. Turning Over. Start swimming prone in water chest deep. From the front swimming position, roll onto the back and remain there floating motionless or resting in a floating position, then resume swimming position and continue swimming.
- ❑ 15. Leveling Off. Wade to position in neck-deep water, then turn and face the shallow water. With a minimum of push-off from the bottom, swim to waist-deep water before standing.
- ❑ 16. Survival Float. Start in deep water over the head; assume the resting position with the body vertical in the water and the face also in the water; by motion of the arms and legs, raise the head out of the water; exhale and inhale and resume resting position.
- ❑ 17. Feet Foremost Jump Into Waist-deep Water. This test should finish with a glide, a kick glide, or the combined beginner's stroke prone.
- ❑ 18. Jump Into Deep Water, Level, and Swim.
- ❑ 19. Plain Front Header. This test should be done from a solid deck at a low elevation over water neck deep. Finish by emerging and swimming a little way along the surface.
- ❑ 20. Jump into deep water, level off, and swim 15 yards (13.7 meters). Without stopping or touching, turn about and swim back to the starting point.
- ❑ 21. Do a plain front header from a deck or dock, level off, and swim 15 yards (13.7 meters), turn about, and start swimming back. Halfway back, turn to the supine position and rest either motionless or with gentle paddling movements for 15 seconds. Turn back again to front swimming position and swim to starting point.
- ❑ 22. On land, demonstrate the proper way to put on a personal flotation device.
- ❑ 23. Show how to release a cramp from a survival float position in neck-deep water and progress to deep water.
- ❑ 24. From a deck or dock do an arm and leg extension rescue. Do an extension rescue using a pole, towel, or shirt.

- 25. Demonstrate artificial respiration.
- 26. Know the causes of and methods for the prevention of accidents that can occur in or near the water.

Causes	Prevention
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Date completed _____

Instructor's Signature _____

Swimming – Beginner's Advanced

Receive the American Red Cross Level IV Stroke Development or YMCA certificate or equivalent in Swimming – Beginner's Advanced OR pass the following requirements:

- 1. Bobbing. Practice bobbing in neck-deep water prior to going into deep water. Demonstrate bobbing in deep water with a definite rhythm, inhaling when the mouth clears the water and exhaling as the head goes below the water.
- 2. Breath Control. Stand in chest-deep water and demonstrate rhythmic breathing at the rate of 24 to 26 times in two minutes.
- 3. Swimming in Place. Remain afloat in a confined area (within an eight-foot circle) by using a modified human stroke for a period of one minute.
- 4. Changing Positions. Change from a prone swimming position to a vertical position and then to a supine position. Change from a supine to a vertical position, and then to a prone position.
- 5. Elementary Backstroke. Swim 25 yards (22.9 meters) using the elementary back stroke.
- 6. Crawl Stroke. Swim 25 yards (22.9 meters) using the crawl stroke.
- 7. Survival Stroke. Swim 25 yards (22.9 meters) using the survival stroke.
- 8. Use of Personal Flotation Device. Jump into water from a deck or dock while wearing a personal flotation device. Show how to be comfortable while in the prone, vertical, and supine positions. Each position should be held for at least one minute. Use a seat cushion to support the body correctly in the water.*
- 9. Survival Float. In deep water over the head, do a survival float for two minutes.
- 10. Know how to release a cramp while in deep water.

-
-
- 11. Rescue Technique. Demonstrate a rescue involving the use of a reaching pole and one involving the use of an article of clothing.

- 12. Combined Test. Dive into deep water from a deck or dock, swim a minimum of three body lengths below the surface, come to the surface, and stay afloat in a confined 20 yards (18.3 meters) using either the elementary backstroke or crawl stroke.
- 13. Know the causes of and methods for the prevention of accidents that can occur in or near the water.

Accidents	Causes	Prevention

- 14. Demonstrate artificial respiration.

* **Note:** Any Coast Guard-approved personal flotation device may be used.

Note: All participants must wear life jackets.



Pathfinder's Name

Swimming, Intermediate

Receive the American Red Cross - Level V Stroke Refinement or YMCA certificate or equivalent in Intermediate Swimming OR pass the following requirements:

- 1. Using a kick board for arm support, swim 20 yards (18.3 meters) employing a scissors stroke of the legs, 20 yards (18.3 meters) using a flutter kick, and 20 yards (18.3 meters) using the breaststroke kick. The three leg strokes do not have to be performed consecutively.
- 2. Using some form of leg support or trailing the legs with minimum motion, swim ten yards employing the side stroke of the arms, ten yards using the crawl stroke, and ten yards using the breaststroke arm pull. The arm strokes do not have to be performed consecutively.
- 3. Swim 50 yards (45.7 meters) continuously using the elementary back stroke.
- 4. Swim 100 yards (91.4 meters) continuously on the front or the side using a fully-coordinated style of swimming.
- 5. Demonstrate correctly a simple turn for swimming on front or side in a closed course.
- 6. Float motionless or rest in a supine-floating position with minimum hand and foot movement in deep water for at least three minutes.
- 7. By sculling with the hands only, move backward through the water on the back for a minimum distance of ten yards.
- 8. Tread water using auxiliary arm movements continuously for one minute.
- 9. Duck beneath the surface of the water and swim at least two body lengths under the water.
- 10. Do a fully-coordinated standing front dive into deep water in reasonably good form.
- 11. Do a running jump from a low elevation into deep water, level off, and swim.
- 12. Put on a personal flotation device in deep water.

- ❑ 13. Demonstrate the following rescue techniques:
 - a. Wading rescue using extensions
 - b. Use of heaving line
 - c. Swimming rescue using swim board or ring buoy
 - d. One method of artificial respiration
- ❑ 14. Swim continuously for five minutes. All styles mastered on the front, the side, and the back may be used.
- ❑ 15. Know the causes and prevention of accidents that can occur in or near the water.

Causes

Prevention

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Date completed _____

Instructor's Signature _____



Pathfinder's Name _____

Swimming

Receive the American Red Cross Level VI Skill Proficiency or YMCA certificate or equivalent in Swimming OR pass the following requirements:

- 1. Swim continuously in a coordinated and effective manner the following strokes and distances:
 - a. Breaststroke for 50 yards (45.7 meters)
 - b. Sidestroke for 100 yards (91.4 meters)
 - c. Back crawl for 50 yards (45.7 meters)
 - d. Crawl for 100 yards (91.4 meters)
- 2. Swim 25 yards (22.9 meters) continuously on the back, legs alone, using either the inverted breaststroke kick or the inverted scissors kick.
- 3. Demonstrate an effective turn in a closed course on the following:
 - a. Front
 - b. Side
 - c. Back
- 4. Surface dive in good form to a depth of 8 feet (2.4 meters) and swim a minimum distance of 20 feet (6.1 meters) under water.
- 5. In good form, do a pike and tuck surface dive.
- 6. In good form, do a shallow plunge dive (racing start) and continue in stroke.
- 7. In good form, do a running front dive off both feet from a deck and from a springboard.
- 8. Demonstrate sidestroke turn.
- 9. Demonstrate speed turn and pull-out for breaststroke.
- 10. Demonstrate flip turn for front crawl.
- 11. Demonstrate pike surface dive.
- 12. Demonstrate tuck surface dive.
- 13. Tread water for three minutes (one minute with no hands.)
- 14. Demonstrate throwing rescue.
- 15. Demonstrate rolling spinal injury victim to face up.

Date completed _____

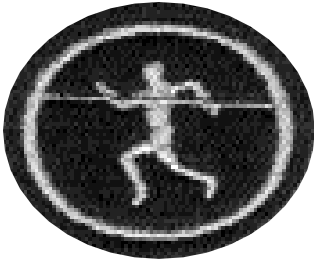
Instructor's Signature _____

Recreation
General Conference
2002 Edition

Swimming, Advanced

Receive the American Red Cross Level VII Advanced Skills or YMCA certificate or equivalent in Advanced Swimming OR pass the following requirements.:

- 1. Swim a coordinated and effective stroke continuously for the following strokes and distances:
 - a. Elementary backstroke for 50 yards (45.7 meters)
 - b. Breaststroke for 100 yards (91.4 meters)
 - c. Inverted breaststroke for 50 yards (45.7 meters)
 - d. Sidestroke for 100 yards 91.4 meters)
 - e. Overarm sidestroke for 100 yards (91.4 meters)
 - f. Tudgen stroke for 50 yards (45.7 meters)
 - g. Back crawl for 100 yards (91.4 meters)
 - h. Crawl for 100 yards (91.4 meters)
- 2. Do the following dives in good form:
 - a. Standing front dive
 - b. Running front dive
 - c. Pike surface dive
 - d. Tuck surface dive
- 3. Do a survival float for ten minutes while fully clothed .
- 4. Do a survival stroke for ten minutes while fully clothed.
- 5. Do a surface dive and swim underwater for ten yards.
- 6. Swim continuously for 30 minutes using one or more styles of swimming. Hanging onto the sides (resting) or touching the bottom with the feet is not permitted.
- 7. Know the causes and prevention of accidents that can occur in or near the water.



Pathfinder's Name

Track and Field

1. Know the basic rules, safety considerations, and warm-up exercises for the six track and field events listed below.

Rules _____

Safety considerations _____

Warm-up exercises _____

2. Run the 50-yard (45.7 meters) dash in the time (seconds) for your sex and age as follows:

BOYS				GIRLS			
Age	Sec.	Age	Sec.	Age	Sec.	Age	Sec.
10	8.2	14	7.1	10	8.5	14	8.0
11	8.0	15	6.9	11	8.4	15	8.1
12	7.8	16	6.7	12	8.2	16	8.3
13	7.5			13	8.1		

Your Time _____

3. In sprinting, which part of the foot should touch first during the stride?

What are the proper arm and head positions?

- ❑ 4. Run the 600-yard (548.6 meters) run-walk in the time (minutes/seconds) for your sex and age as follows:

BOYS

GIRLS

Age	Min/Sec	Age	Min/Sec	Age	Min/Sec	Age	Min/Sec
10	2' 33"	14	2' 01"	10	2' 48"	14	2' 46"
11	2' 27"	15	1' 54"	11	2' 49"	15	2' 46"
12	2' 21"	16	1' 51"	12	2' 49"	16	2' 49"
13	2' 10"			13	2' 52"		

Your Time _____

- ❑ 5. Answer the following questions about distance running:

Find two Bible stories that mention distance runners?

1. _____
2. _____

What are the proper clothes, including shoes, for distance running in your area?

How long is the average track? _____

How far is a marathon race? _____

Which part of the foot should touch first during the stride?

What are the proper arm and head positions while distance running?

What is the proper way to breathe?

How does cross-country running differ from running on a track?

- 6. Run one of the following events at least twice and record the best time:
 - a. 50-yard (45.7 meters) dash with four hurdles.
Your best time _____
 - b. 70-yard (64.0 meters) dash with six hurdles.
Your best time _____

- 7. Do the high jump with good form at least five times and record the highest jump.
Your highest jump _____

- 8. Do a running broad jump three times and record the best length.
Your best length _____

- 9. Run the following relays:
 - a. Visual pass relay
 - b. Blind pass relay



Pathfinder's Name

Tumbling and Balancing

(Instructor Required)

1. List safety precautions each performer and spotter should follow.

2. Describe the basic positions:

Tuck _____

Pike _____

Lay-out _____

Hyper-extension (arch) _____

Squat _____

Straddle _____

Standing position (extension) _____

3. Perform the following individual stunts with form and poise:

- a. Tuck forward roll from squat
- b. Pike forward roll from standing position
- c. Dive roll (length equal to one's height)
- d. Tuck backward roll from squat
- e. Backward roll from standing position
- f. Straddle legged backward roll from extension
- g. Swedish fall
- h. Frogstand (knee-elbow stand)
- i. Headstand from frogstand
- j. Headstand
- k. Handstand
- l. Cartwheel

4. Perform with form and poise any six of the following stunts with a partner:
- a. Chest stand
 - b. Thigh stand
 - c. Knee-shoulder balance
 - d. Front angel balance
 - e. Shoulder stand
 - f. Low knee support
 - g. Thigh balance
 - h. Front angel straddling waist

Date completed _____

Instructor's Signature _____

Tumbling and Balancing, Advanced

(Instructor Required)

- 1. Have the Tumbling and Balancing honor.
- 2. Perform the following individual tumbling stunts with form and poise:
 - a. Kip
 - b. One-handed Cartwheel (both ways)
 - c. Front handspring
 - d. Back handspring
 - e. Round off (must execute step in the approach)
- 3. Perform any four of the following individual tumbling stunts with form and poise.
 - a. Front somersault (sometimes called air spring or front flip)
 - b. Headspring
 - c. One-handed handspring
 - d. Aerial cartwheel
 - e. Tinserca
 - f. Front walkover
 - g. Back walkover
 - h. Aerial walkover
 - i. Baroni
 - j. Neckspring
 - k. Butterfly
- 4. Perform any three of the following balances with form and poise:
 - a. Press to handstand from headstand or frogstand.
 - b. One-handed handstand; alternate for girls: back walkover to headstand
 - c. Pirouette
 - d. Straight-armed planche (two arm); alternate for girls: control straddle down from handstand.
 - e. Bent arm planche (one arm); alternate for girls: three-second handstand and controlled roll out.
 - f. Yogi handstand
 - g. Straight arm-straight leg press to handstand; alternate for girls: straight arm-straddle leg press to handstand.

- ❑ 5. Perform any three of the following partner stunts and balances with form and poise:
 - a. Toe pitch (back flip)
 - b. Low arm to arm
 - c. High arm to arm
 - d. Low hand to hand
 - e. High hand to hand
 - f. Front angel balance on hands

- ❑ 6. Perform any one of the following combination stunts with form and poise:
 - a. Round off/back handspring/backward somersault
 - b. Round off/two back handsprings
 - c. Borani/back handspring
 - d. Round off/backward somersault/back handspring
 - e. Tinserca/front somersault
 - f. Backward somersault/back handspring



Pathfinder's Name _____

Water Skiing

- 1. Have the Intermediate Swimming Honor.
- 2. Know and practice the following safety rules:
 - a. Never ski at night.
 - b. Never ski during an electrical storm.
 - c. Always wear a ski vest while skiing.
 - d. Check to be sure the vest buckle is securely locked.
 - e. Make sure the ski rope is in good condition.
 - f. Make sure the ski bindings are in good condition.
 - g. Have a spotter or a mirror in the ski boat.
 - h. Stay clear of objects, such as other skiers, swimmers, docks, or floating objects.
 - i. If a fall occurs, let go of the rope.
 - j. After a fall, raise a hand to indicate you are all right.
 - k. Do not stand in the ski boat while it is moving.
- 3. Know the following hand signals:
 - a. Slower
 - b. Speed okay
 - c. Faster
 - d. Back to dock
 - e. Stop
 - f. Turn
- 4. Put on skis in deep water. Execute a deep water start on two skis with a full-line rope.
- 5. Successfully cross both wakes.
- 6. Identify the following:
 - a. Double ski
 - b. Slalom ski
 - c. Trick ski
 - d. Kneeboard

Date completed _____

Instructor's Signature _____

Recreation
General Conference
2002 Edition

Water Skiing, Advanced

- 1. Have the Water Skiing Honor.
- 2. Always wear a ski vest while skiing.
- 3. Successfully slalom ski, starting from deep water on a full line rope.
- 4. Cross both wakes on a slalom ski.
- 5. Make a full 360-degree turn around on one of the following:
 - a. Kneeboard
 - b. Trick skis
 - c. Wakeboard



Pathfinder's Name

Wilderness Leadership

- 1. Have the following honors:
 - a. Backpacking
 - b. Camping Skills I-IV
 - c. Fire Building and Camp Cookery
 - d. First Aid
 - e. Hiking
 - f. Orienteering

- 2. Know and practice the principles of health, safety, and rules of conduct to be used when in the wilderness with a youth group.

Principles of health _____

Safety _____

Rules of conduct _____

- 3. Know and demonstrate the principles of signaling and rescue.

- 4. Assist in planning and participate with a group in a mock demonstration of what to do if lost, stranded, or injured in the wilderness.

Date completed _____

Assist in planning and participate as a leader in a search and rescue operation involving a hidden "injured" person.

Date completed _____

- 5. Demonstrate some skills necessary for wilderness leadership in one of

the following areas:

- a. Tropical
- b. Desert
- c. Swamp
- d. Mountain (rocks, ice, high altitude)
- e. Temperate forest
- f. Plain and tundra

Area chosen _____

Skills demonstrated _____

- 6. Understand and demonstrate wilderness and camping etiquette regarding the preservation of the outdoors.

- 7. Identify in the wild, prepare, and eat ten varieties of wild plants.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____
- 9. _____
- 10. _____

8. Learn some of the wilderness leadership qualities of two of the following:

- a. Moses
- b. David
- c. Elijah
- d. Joshua
- e. John the Baptist

1. _____

Qualities _____

2. _____

Qualities _____

9. Lead a group in a weekend wilderness camping experience, applying the principles and skills learned in this honor.

Date completed _____

Date completed _____

Instructor's Signature _____

Wilderness Leadership, Advanced

- 1. Have the following honors:
 - a. Edible Wild Plants
 - b. Outdoor Leadership
 - c. Wilderness Leadership
 - d. Wilderness Living

- 2. Know and practice the principles of camouflage and tracking.

- 3. What physical and mental preparations are necessary before a wilderness experience?

Physical

Mental

- 4. Demonstrate some skills necessary for wilderness leadership in two of the following areas not completed for the Wilderness Leadership Honor:

- a. Desert
- b. Mountain (rocks, ice, high altitude)
- c. Plain and tundra
- d. Swamp
- e. Temperate forest
- f. Tropical

Areas chosen

1. _____

2. _____

- 5. Demonstrate the construction and operation of two types of snares or traps.
 - 1. _____

 - 2. _____

- 6. Know the points of consideration in the following types of travel:
 - Glacial _____

 - Mountain _____

 - Snow _____

 - Water _____

- 7. Understand the principles of developing a faith in divine leadership as outlined in Psalms 91.

- 8. Understand what steps should be taken for the survival of the wilderness.

- 9. Assist in instructing one honor listed in requirement 1 of the Wilderness Leadership Honor.
Date completed _____

- 10.** Build a shelter from non-living but natural materials (such as a debris hut).

Materials used _____

- 11.** Plan and participate in a week's wilderness camping experience, applying the principles and skills learned in this honor.

Date completed _____



Pathfinder's Name

Wilderness Living

1. Go on at least two weekend campouts during which you learn the skills called for in this honor.

Campout dates 1. _____

2. _____

2. Tell five things to do if lost in the wilderness. Know three methods of determining directions without a compass.

Things to do if lost

1. _____

2. _____

3. _____

4. _____

5. _____

Methods of determining direction

1. _____

2. _____

3. _____

3. Demonstrate three ways to purify drinking water.

1. _____

2. _____

3. _____

4. Know three ways to collect drinking water in the wilderness and demonstrate two of these methods.

1. _____

2. _____

3. _____

- ❑ 5. Demonstrate two methods of judging the height of a tree and the width of a stream.
 - Tree height 1. _____
 - 2. _____
 - Stream width 1. _____
 - 2. _____

- ❑ 6. Identify four wild animal or bird tracks.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____

- ❑ 7. Using a compass, follow a course for more than 100 yards (91.4 meters) with three different headings and less than 5% error.

- ❑ 8. Identify in the wild, prepare, and eat ten varieties of wild plants.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
 - 7. _____
 - 8. _____
 - 9. _____
 - 10. _____

- ❑ 9. Have a personal survival kit of 15 items and know how to use each item.

	Item	Use
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

10. Explain the necessity in wilderness living of adequate sleep, proper diet, personal hygiene, and proper exercise.

Adequate sleep _____

Proper diet _____

Personal Hygiene _____

Proper exercise _____

11. Have the First Aid honor. In addition to the First Aid honor, know the prevention, symptoms, and the first aid treatment for the following:
(Complete Chart #1)

- | | |
|------------------------|------------------------------|
| a. Hypothermia | e. Poison ivy and poison oak |
| b. Venomous snake bite | f. Open wound infection |
| c. Heat and sunstroke | g. Altitude sickness |
| d. Heat exhaustion | h. Dehydration |

12. Demonstrate two ways to signal for help.

1. _____

2. _____

- 13. Demonstrate the principles of stalking and concealment.

- 14. Explain how to prepare and provide shelter on the following:

Snow slopes _____

Rocky areas _____

Swamps and marshes _____

Forests and tundra _____

- 15. Prepare a balanced menu for two people for a weekend. Prepare these meals while on a campout over an open fire or a camp stove. (Complete Chart #2)

- 16. Know ways to observe wilderness etiquette and how you can contribute to wilderness conservation.

- 17. Demonstrate how to tie the following knots and know their uses:

Bowline _____

Bowline on a bight _____

Clove hitch _____

Double fisherman's _____

Figure eight _____

Prusik _____

Taut-line hitch _____

Two half hitches _____

Square _____

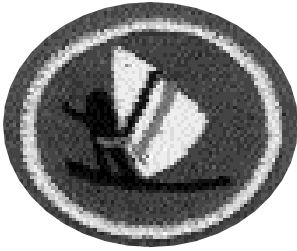
Wilderness Living, Chart #1

Know the prevention, symptoms of and the first aid for :

Prevention	Symptoms of	First Aid
Hypothermia		
Venomous snake bite		
Heat and Sun stroke		
Heat exhaustion		
Poison Ivy and Poison Oak		
Open wound infection		
Altitude sickness		
Dehydration		

Wilderness Living, Chart #2

	Breakfast	Lunch	Supper
Day 1			
Day 2			



Pathfinder's Name

Windsurfing

- 1. Have the Intermediate Swimming Honor.
- 2. Learn the meaning of the following terms:

Across the wind _____

Backhand _____

Basic starting position _____

Beginner's checklist _____

Board control _____

Centerboard _____

Center line _____

Center plane _____

Clew _____

Forward _____

Forward hand _____

In _____

Jibe _____

Mast position _____

Out _____

Points of the clock _____

Sail trim _____

Self rescue _____

Scissor technique _____

Tack _____

Uphaul _____

Visual reference point _____

- 3. Know the names of the board parts and demonstrate how to rig your own sail.

- 4. Explain the basics of sailing theory.

- 5. Define and demonstrate the basic starting position.

- 6. Define and demonstrate the four steps to tacking.

1.

2.

3.

4.

- 7. Define and demonstrate the four steps to jibing.

1.

2.

3.

4.

- 8. List the seven starting sequence steps used to start a sailboard moving through the water.

1.

2.

3.

4.

- 5. _____
- 6. _____
- 7. _____

9. Answer the following questions about safety:

What safety equipment should be worn while wind surfing?

Why is it important to know the local weather forecast before going out on the water?

When first learning to windsurf, why is it important to be in an enclosed or protected area?

What are the hand signals for "Everything is okay" and "I need help"?

10. How should the sail and sailboard be cared for to keep them in good working order?

11. Successfully sail a sailboard to a visual point of reference and return to the starting position.



Pathfinder's Name

Winter Camping

- 1. Earn the Camp Craft Honor.
- 2. Make up a complete list of necessary camping equipment for winter conditions, such as possible sub-zero (-18° c) temperatures, storms, and snow. (Complete Chart #1)
- 3. Explain the principles of maintaining body warmth and dryness through the proper use of clothing and sleeping gear under all temperatures down to zero while traveling, resting, and sleeping.

Traveling _____

Resting _____

Sleeping _____

- 4. List and explain the characteristics of winter campsite selection.

- 5. Describe, or show where possible, the preparation of a level tent site in snow and pitch a tent in winter conditions.

- 6. Prepare a balanced three-day menu to be used in your winter camping experience. (Complete Chart #2)

7. Know how to get water from snow.

8. Know five safety rules of winter camping.

1. _____

2. _____

3. _____

4. _____

5. _____

9. Explain the proper steps to take if stranded without equipment in winter conditions.

10. Show knowledge of and ability to prevent, recognize, and care for mild frostbite, hypothermia, mild snow blindness, and dehydration.
(Complete Chart #3)

11. Spend a total of six days and nights in cold weather camping.
- a. All nights should have temperature lows in the 40's (5° c).
 - b. Two nights should have temperature lows below freezing (0° c).
 - c. All nights should be spent in tents, tarps, or the open.

Dates

Temperatures

Night spent in

Winter Camping, Chart #2

Balanced three-day menu for winter camping

	Breakfast	Lunch	Supper
Day 1			
Day 2			
Day 3			

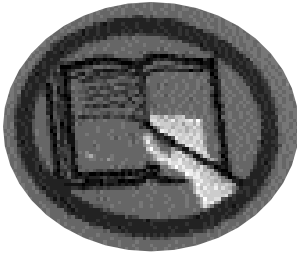
Winter Camping, Chart #3

Know how to prevent, recognize and care for:

Prevention	Recognition	Care for
Mild frostbite		
Hypothermia		
Mild snow blindness		
Dehydration		

Vocational Index

Accounting	
Automobile Mechanics	
Automobile Mechanics, Advanced	
Barbering/Hairstyling	
Bible Evangelism	
Bookbinding	
Bookkeeping	
Carpentry	
Christian Sales Principles	
Communications	
Communications, Advanced	
Computer	
Computer, Advanced	
Electricity	
House Painting - Exterior	
House Painting - Interior	
Internet	North American Division
Internet, Advanced	North American Division
Journalism	
Masonry	
Native Brush Construction	South Pacific Div/Island Ed.
Paperhanging	
Plumbing	
Printing	
Radio	
Radio, Advanced	
Radio Electronics	
Shoe Repair	
Shorthand	
Small Engines	
Teaching	
Typewriting	
Upholstery	South Pacific Division
Video	South Pacific Division
Welding	
Woodworking	



Pathfinder's Name

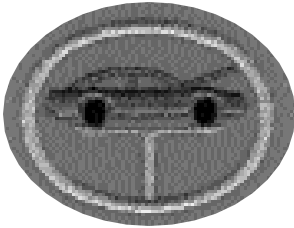
Accounting

Complete a high school or college course in accounting or the following requirements:

- 1. Show transactions necessary for acquisition or deposit of assets, and acquisition and disposal of liability.
Completion date _____
Show transactions necessary to close income and expense accounts at year end.
Completion date _____
- 2. Be able to correctly classify balance sheet items with short term asset, long term asset, contra asset, short term liability, long term liability, and equity.
Completion date _____
- 3. Be able to write an income statement from a trial balance.
Completion date _____
- 4. Be able to reconcile bank balance to book balance in checking accounts, including deposit in transit, service charge, returned NSF, interest on account, and checks in transit.
Completion date _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Automobile Mechanics

1. Properly start an automobile or light truck engine with an automatic transmission and one with a standard transmission.

Explain why it is necessary for the engine to have the proper oil, water, fuel, and battery pressures and levels for proper engine operation.

Oil _____

Water _____

Fuel _____

Battery Pressure _____

2. Explain the principles of:

Four-cycle engines _____

Two-cycle engines _____

Explain the difference between:

Gasoline engines _____

Diesel engines _____

Explain the major differences between:

Carburetor fuel systems _____

Fuel-injection systems _____

- 3. Describe the construction of a typical gasoline engine

Explain briefly the function of these units:

Engine:

Crankshaft _____

Connecting rods _____

Pistons _____

Camshaft _____

Valves _____

Oil pump _____

Carburetor _____

Fuel injectors _____

Ignition distributor _____

Fuel distributor _____

Electrical system including alternator _____

Battery _____

Regulator _____

Difference between:
Standard transmission _____

Automatic transmission _____

How the engine torque is transmitted to both kinds of transmissions:
Standard _____

Automatic _____

The purpose of overdrive _____

Difference between:
Rear wheel drive _____

Front wheel drive _____

Difference between:
Drum brakes _____

Disk brakes _____

Standard brakes _____

Power brakes _____

Parking brake _____

- 4. Perform typical automotive maintenance as listed below:
 - a. Check engine and transmission oil levels.
 - b. Check water/anti-freeze level. Change and flush the cooling system.
 - c. Change engine oil and filter.
 - d. Change a tire/wheel assembly, following proper safety procedure.
 - e. Lubricate the chassis according to the vehicle service manual.

- 5. How often should the engine oil, transmission oil, and cooling fluid be changed?

Engine Oil _____

Transmission Oil _____

Cooling Fluid _____

- ❑ 6. Give some pointers on proper care of the vehicle and its finish, both interior and exterior.

Interior _____

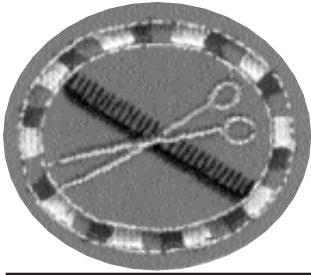
Exterior _____

Automobile Mechanics, Advanced

- 1. Have the Automobile Mechanics Honor
- 2. Disassemble, inspect, and reassemble an automobile or light truck engine. Replace any defective or worn parts. Rebuild, start, and operate the vehicle. Keep a complete log of events during the overhaul.
- 3. Remove and replace a standard or automatic transmission assembly.
- 4. Rebuild the brake assembly on an automobile or light truck, following proper safety procedures. Demonstrate proper brake bleeding and adjustment. Properly repack a wheel bearing.
- 5. Perform a minor tune-up, including the replacement of spark plugs and visually checking the electrical system.

Date completed _____

Instructor's Signature _____



Pathfinder 's Name

Barbering/Hairstyling

- 1. Spend a minimum of five hours observing a licensed master barber/hair stylist while at work.
- 2. Name three essentials in the care of hair.
 - 1. _____
 - 2. _____
 - 3. _____
- 3. Demonstrate the ability to give a shampoo correctly.
- 4. Be able to explain and demonstrate at least two methods of cutting hair.
 - 1. _____
 - 2. _____
- 5. Explain and demonstrate the purpose of at least two different kinds of combs used in cutting hair.
 - 1. _____
 - 2. _____
- 6. Explain and demonstrate the purpose of two different kinds of scissors.
 - 1. _____
 - 2. _____
- 7. Explain and demonstrate at least two purposes for the use of a clipper.
 - 1. _____
 - 2. _____
- 8. Write 500 words on what you learned during your apprenticeship.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Bible Evangelism

- 1. Be in at least the eighth grade.
- 2. Go on a visit with your pastor to a Bible study, a hospital visit, and a visit to a church member.
Person(s) studies with _____
Person(s) visited in hospital _____
Church member(s) visited _____
- 3. Arrange with your pastor to attend a church board meeting and a church business meeting. Make a written report of your visits to both meetings.
Board Meeting date _____
Business Meeting date _____
- 4. List the steps in church organization from the member to the General Conference and know their relationship to each other.

- 5. Find out what your church spends money on and what percentage of the budget goes to what expenses.
Total annual budget _____
Expense Report _____

- 6. Write a report of an interview with your pastor in which you asked him the following questions:
 - a. What is your daily routine like?
 - b. What is your weekly routine like?
 - c. What education is required to become a minister?
 - d. What education outside of theology would complement a minister?
 - e. From what source is the pastor paid?
 - f. What is the most rewarding part of your ministry?
 - g. What is the hardest part of your ministry?
 - h. What are beneficial vocations for a pastor's wife to have?
 - i. How did you know that God called you to the ministry?
 - j. How would I know if God were calling me to the ministry?
 - k. How do you do soul winning?
 - l. How does evangelism enter into your soul winning?
 - m. What advice would you give to someone who was thinking about becoming a minister?

- 7. Do two of the following:
 - a. Participate in the presentation of a youth evangelistic series.
Date of meetings _____
 - b. Give two Bible studies.
 - 1. _____
 - 2. _____
 - c. Make four hospital visits, presenting a devotional thought and prayer at each one.
Persons visted and dates
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - d. Give a sermon of at least 20 minutes in length.
Subject _____
Date presented _____

e. Give two evening and two morning devotionals for a camp out.

Camp out date _____

Subjects presented

1. _____

2. _____

3. _____

4. _____

f. Give devotional worships for five days at a school.

School _____

Classroom _____

Date completed _____

g. Earn the Pathfinder Evangelism Award.

Date completed _____

For your choice of the above, a thorough preparation is needed. Where applicable, outlines or memorized material should be used. A reading of the presentation is not permitted.

8. Through Bible and the writings of Ellen G. White study and learn how Jesus treated crowds of people in ministering to them.

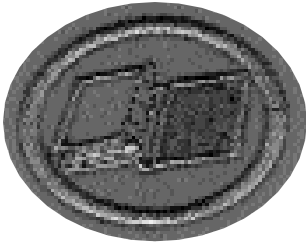
Sources _____

9. Show that you have a personal daily devotional life for at least six months.

Date completed _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Bookbinding

1. Be able to identify the following terms:

Foredge _____

Gutter _____

Endsheet _____

Flysheet _____

Signature _____

Mull _____

Backbone _____

Head _____

Foot _____

Deckle edge _____

Guarding sheets _____

Casing-in _____

Buchram _____

- ❑ 2. Describe the difference between the following binding methods:

Perfect binding _____

Hard bound _____

Single signature _____

Spiral (metal and plastic) _____

Saddle stitch _____

- ❑ 3. Perform the following:

- a. Bind a single signature hand binding "manuscript".
- b. Bind a blank book using at least four signatures and a permanent cloth hard board binding, using a "case" method.
- c. The proper way to "break in" a new binding.
- d. Make a "slip case" for your blank book of at least four signatures.

- ❑ 4. Identify and describe the uses for the following binder's tools:

Bone folder _____

Kick press _____

Folding needle _____

Awls _____

Sewing frame _____

Squared card _____

Punch _____

- 5. Define the difference of paper weight in relationship to a ream of paper.

- 6. Describe the color and properties of three types of adhesives used in the binding process and where they are used:
Hot melt animal glue _____

Used _____
Casing-in paste _____

Used _____
Resin Glues _____

Used _____

- 7. Know and list the five principal stages of hand binding
Preparing the signatures _____

Sewing up the signatures _____

Gluing up the back _____

Attaching the boards (covers) _____

Finishing _____



_____ Pathfinder's Name

Bookkeeping

1. What is the difference between bookkeeping and accounting?

Bookkeeping _____

Accounting _____

2. Define the following terms:

Asset _____

Liability _____

Credit _____

Debit _____

Posting _____

Trial balance _____

Voucher _____

Invoice _____

Interest _____

- ❑ 3. What is the difference between double-entry bookkeeping and single-entry bookkeeping?

Double Entry _____

Single Entry _____

- ❑ 4. What education is necessary to be a bookkeeper?

What other education is helpful to a bookkeeping career?

- ❑ 5. What are some career fields that are related to bookkeeping?

- ❑ 6. Conduct an interview with your church treasurer, asking the following questions:

- a. How much time do you spend each week at your job as church treasurer?

- b. What do you do with the money collected in the offering plates?

- c. How do you keep track of who contributed how much money?

- d. What money is sent to the conference?

- e. What money is kept in our local church?

f. Are your records ever reviewed by an accountant?

How often?

g. How do you report the church finances to the church board?

h. How do you report the church finances to the conference?



Pathfinder's Name

Carpentry

1. Describe the function of the following tools:

Band saw _____

Belt sander _____

Jig saw _____

Miter saw _____

Radial arm saw _____

Router _____

Shaper _____

Wood lathe _____

2. Demonstrate how to use the following tools:

- a. Block plane
- b. Circular saw (cut a straight line)
- c. Framing square
- d. Hammer
- e. Hand saw (cut a straight line)
- f. Level
- g. Measuring Tape
- h. Nail set
- i. Plumb bob
- j. Wood chisel

3. Describe the use of and distinguish between the following types of nails:
- 20 penny _____
- 16 penny _____
- 12 penny _____
- 8 penny _____
- 6 penny _____
- Finish _____
- Brad _____
- Roofing _____
- Screw nail _____
- Sinker _____
- Common _____
- Galvanized _____
4. Assist in erecting a frame building not less than 6 x 8 feet (1.8 meters x 2.4 meters) in ground dimensions, with a gable roof, and with at least one door and one window, demonstrating ability to measure and use of tools from requirement 2.
- Completion date _____
5. When building the above project, use all of these features:
- a. Floor joist
 - b. Sub floor
 - c. Shoe plate
 - d. Top plate
 - e. Double plate
 - f. Conventional roof or trusses
 - g. Felt roof
 - h. Shingles
 - i. Window with weight-bearing header
 - j. Door with weight-bearing header
 - k. Fascia on eaves
 - l. Siding

Note: Participants must be 16 years and older to use power tools.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Christian Sales Principles

1. Explain the responsibilities of a Christian salesperson as related to how they treat their customers and boss.

2. List the points in the steps of a sale.

3. Give a statement on how to meet objections.

4. How are the following points valuable to a salesperson?
Researching the market to see how an item or service will sell

Proper training and knowledge about the item or service to be sold

A visit to the plant or home office that produces the item or service

Follow-up visits with first-time customers

- 5. Using actual or hypothetical education and experience, write a resume which could be used in applying for a job.
 - 6. Find out what education is most beneficial for a career in sales.
-
-

What aspects of sales are available to a Christian salesperson?

- 7. Do one of the following:
 - a. Help raise funds through sales of either services, merchandise, or tickets to a Pathfinder, AY Society, or school activity accounting for more than your proportionate share of the sales.
 - b. Earn money for yourself through the selling of merchandise or a service.

- 8. Make a practice sales presentation to your counselor, teacher, or parent on the above item that you are selling.

Item being sold _____

Person solicited _____

- 9. Interview a Christian salesperson and a Christian retailer regarding the following points:

For the Salesperson:

Is a lot of traveling involved in the profession of selling?

What other ways does the job of a salesperson affect family life?

How are sales people paid?

What opportunities for advancement are there in sales?

What does the future hold for a career in sales?

How do you get customers?

What do you like the most about your job?

The least?

Does being a Christian make a difference in the way you do your job?

For the Retailer:

What type of education and training is helpful for a retail sales career?

What advancement opportunities are available in retail sales?

When you place an order, which do you rely on most, service of the sales person, price, market characteristics, or the quality of the product?

What do you do when a customer complains about an error he thinks your store has made when he is actually the one at fault?

Does being a Christian make a difference in the way you run your store?

What do you like the most about your job?

The least?



_____ Patfinder's Name

Communications

1. Do one of the following:
- a. Send and receive by International Morse Code at the rate of three words per minute using flashlight, whistle, mirror, buzzer, or key. (Five-letter words, minimum of 20 words.)
 - b. Send and receive by semaphore code at the rate of seven words per minute using semaphore flags. (Five-letter words, minimum of 20 words.)
 - c. Send and receive by International Morse Code at the rate of three words per minute using wigwag flags. (Five-letter words, minimum of 20 words.)

Message sent _____

Message received _____

Date completed _____

Instructor's Signature _____

Communications, Advanced

- 1. Have the Communications Honor
- 2. Do one of the following:
 - a. Send and receive by International Morse Code at the rate of eight words per minute using flashlight, whistle, mirror, buzzer, or key. (Five-letter words, minimum of 20 words.)
 - b. Send and receive by semaphore code at the rate of 12 words per minute using semaphore flags. (Five-letter words, minimum of 20 words.)
 - c. Send and receive by International Morse Code at the rate of eight words per minute using wigwag flags. (Five-letter words, minimum of 20 words.)

Message sent _____

Message received _____



_____ **Pathfinder's Name**

Computer

- 1. Write 200 words or give a three-minute oral report about the history of computers.
- 2. What is the definition of the following terms:

Hardware _____

Software _____

Floppy Disk _____

Hard Drive _____

Mainframe _____

Desktop Computer _____

Laptop Computer _____

ROM _____

RAM _____

Alphanumeric _____

CPU _____

Circuit board _____

Cursor _____

Port _____

Program _____

DOS or OS _____

CD Rom _____

- 3. What are the proper handling and storage techniques of disks?

- 4. Describe the function of and point out the following components of a personal computer:
Keyboard _____
Monitor _____
System Unit or Central Processing Unit _____

Printer _____
Disk drive _____

- 5. Know the difference between and the uses for the following printers:

	Differences	Uses
Letter Quality	_____	_____
Dot Matrix	_____	_____
Laser	_____	_____
Plotter	_____	_____
Ink Jet	_____	_____
Thermal	_____	_____

6. Show or describe how to protect a computer system from:
dust _____
dirt _____
static electricity _____
power surges and outages _____
Other potentially dangerous factors that could hamper or hurt a
computer system.

7. Name at least four input devices for computers.
1. _____
2. _____
3. _____
4. _____

8. What does it mean to back up a disk or a file?

Why is it important?

9. What is computer preventive maintenance?

Why is it important?

10. Successfully boot, load (install), and use a prepared software program
for use in a computer system. (No computer games.)

11. Tell several ways an individual or family could use a personal computer
other than for games.

Computer, Advanced

- 1. Have the Computer Honor.
- 2. What is the definition of the following terms:
 - Baud rate _____
 - Dip switch _____
 - Data base _____
 - Word processing _____
 - Nanosecond _____
 - DOS _____
 - Internal modem _____
 - External modem _____
 - Peripheral _____
 - Default disk drive _____
 - A "K" of memory _____
 - Screen saver _____
 - Byte _____
 - Scanner _____
 - E-mail _____
 - Font _____
- 3. What is the work of the following people associated with computers:
 - Operator _____
 - _____
 - Data-entry _____
 - _____
 - Programmer _____
 - _____

Systems Analyst _____

Consultant _____

4. How can it be determined when the computer is reading or writing on a disk?

What precautions should be taken while the computer is performing this function?

5. What is the difference between serial and parallel communications?

Serial _____

Parallel _____

6. What does it mean for a computer to be compatible?

7. What legal responsibility applies to software with the following designation:

Public domain _____

Shareware _____

Copyright _____

- ❑ 8. Successfully using the operating system of a personal computer, do the following:
 - a. Clear the screen of the computer without turning the power off.
 - b. Show the contents of a diskette on the computer screen.
 - c. Prepare a diskette for use in disk drive giving it the label name of "Pathfinders."
 - d. Do the same as above again, but this time place the system files on the disk automatically when preparing (formatting) the diskette.
 - e. Show how to check for bad sectors on a diskette or hard drive.
 - f. Rename a file on the disk to a different name.
 - g. Copy the entire contents of one disk to another in a perfect "mirror image."
 - h. Show that you have successfully completed the previous by having the computer "compare" the two disks and show no difference between them.
 - i. Show how to copy a file onto a disk.
 - j. Show how to delete a file from a disk.

- ❑ 9. Research at least four different computer languages (such as BASIC, VISUAL BASIC, PASCAL, C-C++) to find out why they were developed and for what type of application they are used. Type a 200-word report on your findings or give a three-minute oral report.

	Languages	Why developed	Uses
1.	_____	_____	_____
		_____	_____
2.	_____	_____	_____
		_____	_____
3.	_____	_____	_____
		_____	_____
4.	_____	_____	_____
		_____	_____

Report : _____

- ❑ 10. Show proficiency in the use and operation of three of the following:
- a. A Word Processing program by doing the following: Type and print a letter to at least five different people using the same text, but personalizing each letter with the addressee's name appearing at least three times and using the following functions of the Word Processing program.
 - (1) Right justify
 - (2) Center title
 - (3) Change margins and page length
 - (4) Move paragraph
 - (5) Save
 - (6) Copy and paste
 - b. A data base program by making a list of at least 15 people, their addresses, phone number, birth date, and age. Perform a sort function which will list the people alphabetically by last name, list by zip code, list by age, and list by birth date. Make a printout of each list.
 - c. An accounting program by doing one of the following:
 - (1) Perform invoice entry and bill printing of accounts receivable.
 - (2) Perform invoicing and check printing of accounts payable.
 - (3) Perform journal entry and financial reports of the general ledger.
 - d. A newsletter program by preparing three pages of double column text with at least four different computer-generated graphics (such as graphs or clip art), two different fonts, and one headline.
 - e. A spreadsheet program by showing how to add columns, move columns, put a calculation in the field, save, reload, and print. Also perform the function of adding column A and B, dividing the sum by column C, and placing the answer in column D.
 - f. An educational program by teaching any student in grades 1 to 4 how to successfully do a solo operation of a program designed for their age level.
- ❑ 11. Visit the computer department of any business or have someone from a business computer department visit your classroom or club. At a minimum, gather the following information:
What type of computers are used?
-
-

For what applications are the computers used in the business?

Do the computers communicate with each other and how?

How does the business service, maintain, change, and upgrade their hard ware and software?

What percentage or amount is budgeted for the computer purchases and maintenance?

What kind of backup procedures and other precautionary measures are used?

What kind of education is needed and/or useful for a career with computers?

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Electricity

(Instructor Required)

1. Explain and illustrate an experiment by which the laws of electrical attraction and repulsion are shown.

Experiment _____

Explanation _____

2. Explain the difference between direct and alternating current, and demonstrate the uses to which each is adapted. Give a method of determining which kind flows in a given circuit.

Direct _____

Alternating _____

Method of determining kind of flow _____

3. Connect a buzzer, bell, or light with a battery using a switch in line.
4. Make and run a simple electric motor from a kit or take apart a motor and identify the parts, and explain how it works.
5. Make a simple battery cell.
6. Demonstrate ability to replace fuses or reset breakers and demonstrate a National Electric Code (NEC) approved splice using insulated wires.
7. Show how you would rescue a person in contact with a live electric wire, and have a knowledge of the method of reviving a person insensible from shock.
8. Make a simple diagram of a lighting system of an automobile.
9. Make a diagram that properly shows the lights, switches, and convenience outlets controlled by each breaker in a house.

10. Read an electric meter correctly, and compute a residence bill at the rate charged in your community.

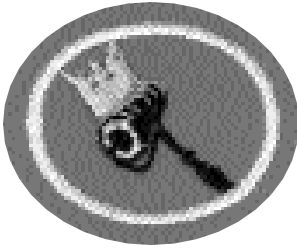
Meter reading = _____

Community rate = _____

Bill = _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Housepainting – Exterior

1. Know and explain the difference in composition of exterior paints versus interior paints.

2. Tell how to prepare the outside of a house for painting by doing such items as preparation for new and old work, paint removal, priming, puttying, finishing, etc.

3. List ten proper color schemes for house painting (if possible, use color charts from a paint shop in making the display).

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

- 4. Tell how to prepare and paint metal properly.
- 5. Name at least three paint thinners and give their specific uses.

Paint Thinners

Uses

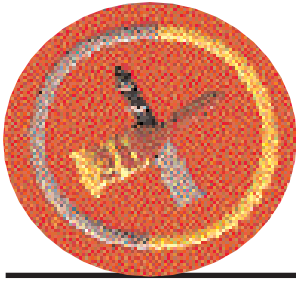
- | | |
|----------|-------|
| 1. _____ | _____ |
| 2. _____ | _____ |
| 3. _____ | _____ |

- 6. Show ability to properly use brush, roller, and spray equipment in outside work.
- 7. Paint the outside of a house with at least four rooms (if possible, make this a group project for a special-needs person in the church or community).

Project _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Housepainting—Interior

1. Explain and demonstrate how to prepare and finish new or old
woodwork in the following ways:

Staining _____

Varnishing _____

Painting _____

2. Give two methods of stippling.

1. _____

2. _____

3. When should a paint spray gun be used?

4. Describe the proper methods for cleaning and care of paint and varnish
brushes.

5. Show how to use putty properly.

6. Explain the difference between exterior and interior paints.

- 7. Make a list of ten proper color schemes for interior house painting using color swatches from a paint shop.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Why are bright/loud colors not preferred?

- 8. Explain the composition of and when you use the following paints:

Oil based _____

Water based _____

- 9. Paint the woodwork of at least four rooms.
- 10. Paint at least one room, showing skill in keeping paint where it belongs.
- 11. Tell and show how to properly store unused paint.



Pathfinder's Name

Journalism

1. Describe the elements of a good lead paragraph and the use and importance of headlines.

Elements _____

Use _____

Importance _____

2. Write a news article of at least three paragraphs, using a good lead paragraph about something interesting that has happened in your church, school, home, or Pathfinder Club.

Title of article _____

3. What are the essentials for writing a good story?

4. Know the difference between passive and active verbs, and give three comparative examples.

Passive _____

Active _____

Examples: 1. _____

2. _____

3. _____

5. Write to a publisher, requesting story-writing guidelines.**

Publisher written to _____

- 6. Write a story on one of the following:
 - a. How your family first accepted Christ, whether it was you, your parents, your grandparents, etc.
 - b. Personal experiences of answered prayer or divine guidance.
 - c. An interesting pet that you have had.
 - d. An experience you have had while at summer camp or on a camping trip.
 - e. When God first became real to you as a friend and personal Savior.
 - f. The most difficult thing about being a Christian today.

Title of story _____

- 7. Submit a story or article to a Seventh-day Adventist publication.**

Title of story/article _____

Date submitted _____

Publication submitted to _____

- 8. Know how to write a cover letter to the editor for submitting your story or article and write a cover letter to the editor to include with your story or article.

- 9. What education is helpful for getting into the career of journalism?

- 10. What types of jobs are available for anyone who is interested in journalism?

Note: ** Story-writing guidelines are available free from the Review and Herald Publishing Assn., 55 West Oak Ridge Drive, Hagerstown, Maryland 21740

Note: Good foundation work in grammar is a fundamental must for this honor.



Pathfinder's Name

Masonry

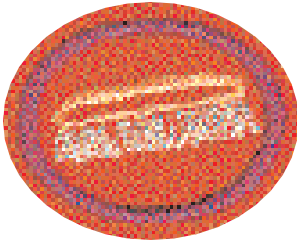
- 1. Name at least six materials commonly used by masons in the erection of walls or buildings.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
- 2. Demonstrate ability to use properly a plumb line, line stretcher (chicken legs), level, trowel, s-tool, and mason hammer.
- 3. Demonstrate a knowledge of building cement characteristics (know how to prevent sweating, cracking, shrinking, crumbling, and loss of strength).
- 4. Make useable mortar and state proper proportions of ingredients (lime, sand, etc.).
- 5. Lay a straight stone, brick, or block masonry wall at least four feet (1.2 meters) high and ten feet (3.0 meters) long, including an inside or outside corner (surface must be struck and broomed).
- 6. Pour a level footing, using hand mixed cement and proper reinforcement.
- 7. Make the forms and lay a piece of concrete walk or floor, using commercially mixed cement. Finish it and rule it.
- 8. Write a paragraph describing the behavior of cement; that is, its reaction to water, its adhesive qualities, how long it takes to set, etc.

Note: Working with a master mason will help tremendously in fulfilling the requirements of this honor.

Date
completed _____

Instructor's Signature _____

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Pathfinder's Name

Paperhanging

1. State how to properly choose designs and combinations of wallpaper for the following:

Living room _____

Dining room _____

Bedroom _____

Bathroom _____

Kitchen _____

Children's play room _____

Church _____

2. Record in a notebook the answers to the above questions and on #3 include your design, color and material chosen for each room.
3. Show proper wall preparation for paper hanging.
4. Explain how to hang wallpaper.

Describe at least two methods.

1. _____

2. _____

Use one method to paper at least two walls of a home, such as in bedrooms, living rooms, etc. Show proper pattern matching.

Date completed _____

Instructor's Signature _____



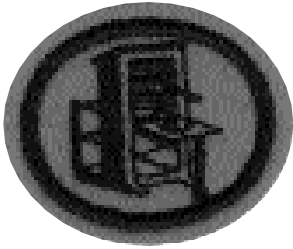
Pathfinder's Name

Plumbing

- 1. Make a diagram showing the plumbing system of a four-room house which includes fixtures for the kitchen, bathroom, and laundry.
- 2. Submit two pieces of iron pipe that you have threaded and connected with proper fitting.
 - 1. _____
 - 2. _____
- 3. Submit a repaired plastic (PVC), iron, or copper pipe, and tell how to repair all three.
 - 1. _____
 - 2. _____
 - 3. _____
- 4. Demonstrate ability to repair a leaky sink faucet and replace or repair toilet flush mechanisms.
- 5. Describe the proper drainage system of the house in #1 and explain the use of traps and vents.
 - _____
 - _____
 - _____
 - _____
- 6. Have a knowledge of the ordinary hot and cold water system of a house and explain how to make the system safe from freezing if the house has to be left without heat during the winter.
- 7. Diagram at least one type of passive water heating system, such as the use of solar energy.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Printing

1. Know how the following printing devices work:

Web press _____

Offset press _____

Photocopy machine _____

Letterpress _____

2. Know what the reference of pound means in determining the weight of paper.

Know what the following paper types are used for:

Offset _____

Bond _____

Coverweight _____

Index _____

3. Tour a print shop or newspaper company.

Shop/company toured _____

Write a 300-word report or give a three-minute oral report on the steps taken in the printing process that you observed.

- 4. Do some research to learn about the history of printing. Trace the development of printing by learning how printing presses have progressed to the present.
- 5. Know the different inks available for printing and their characteristics.

Inks	Characteristics
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- 6. Know the meaning of the following terms:

Backing up _____

Blanket _____

Bleed _____

Boldface _____

Camera ready art _____

Caption _____

Clip art _____

Collate _____

Color separations _____

Contact print _____

Debossing _____

Embossing _____

Engraving _____

Font _____

Ghosting _____

Intaglio _____

Jog _____

Matte _____

Negative _____

Paste-up _____

Register _____

Set-Off _____

Show Through _____

Thermography _____

Water mark _____

Work and turn _____

- 7. Know the difference between half-tones, duo-tones, and the four-color process.

Half-tones _____

Duo-tones _____

Four-color process _____

- 8. Interview a printer to find out the following:

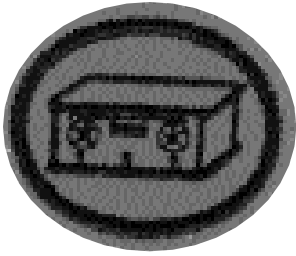
What education is needed to get into the printing field?

What advancement opportunities are available in printing?

What does the future hold for the printing industry?

What do you do in your business to keep customers happy?

What career opportunities related to printing are available?



Pathfinder's Name

Radio

1. Pass a test and receive your license for the Technical Class Amateur Radio License
- OR**
- Technician Class Amateur Radio License.

Date completed _____

Instructor's Signature _____

Pathfinder's Name

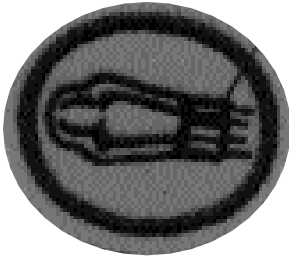
Radio, Advanced

- 1. Have the Radio Honor
- 2. Pass a test and receive your license for the General Class Amateur Radio License.

Date completed _____

Instructor's Signature _____

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Pathfinder's Name

Radio Electronics

1. Identify at least 20 symbols used in electronics.
- | | |
|-----------|-----------|
| 1. _____ | 11. _____ |
| 2. _____ | 12. _____ |
| 3. _____ | 13. _____ |
| 4. _____ | 14. _____ |
| 5. _____ | 15. _____ |
| 6. _____ | 16. _____ |
| 7. _____ | 17. _____ |
| 8. _____ | 18. _____ |
| 9. _____ | 19. _____ |
| 10. _____ | 20. _____ |

2. Identify the value of resistors by the color code.

3. Demonstrate proper soldering techniques.

4. Explain use and operation of various important components in electronics such as

Resistors _____

Variable capacitors _____

Fixed capacitors _____

Coils _____

Transistors _____

Integrated circuits _____

Diodes _____

Transformers _____

5. Know and understand Ohm's law.

6. Determine how to correctly place or pin integrated circuits, transistors, diodes, and capacitors in a circuit board.

7. What is meant by a parallel and a series circuit?

8. From a kit or from scratch make two of the following:

- a. Photocell guard or counter
- b. Siren
- c. Simple voltmeter
- d. Pressure sensor
- e. Simple DC power supply
- f. Simple transistor radio

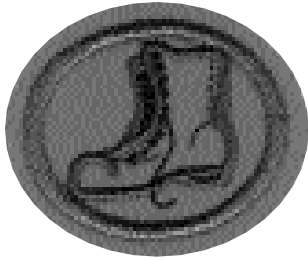
9. Draw from memory, using proper symbols, the complete wiring diagram of the devices constructed in requirement 8.

❑ 10. List ten ways electronics are used in everyday life.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Shoe Repair

1. Name at least five essential parts of a shoe and explain their uses.

Parts	Uses
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

2. What is the difference:

Hand-turned soles _____

Goodyear welt soles _____

McKay sewed soles? _____

Which is the easiest to repair? _____

3. Properly wax the thread, and with two needles or waxed ends, mend a pair of shoes that have rips in them. Use the double-stitch method of sewing.
4. Satisfactorily half-sole a pair of shoes by nailing the soles on. Make sure the nails are of the proper length.
5. Fit and attach a pair of rubber heels.
6. What kind of leather should be used in repairing the soles of shoes?

How is such leather generally tanned?



Pathfinder's Name

Shorthand

- 1. Be able to take dictation on new material at 80 words per minute for three consecutive minutes and transcribe accurately the notes taken.
- 2. Have available a shorthand dictionary (usually provided by course publishers).

Date completed _____

Instructor's Signature _____

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- 3. List four basic fuels used in small engines, and explain their use.

Fuels

Uses

- 1. _____
- 2. _____
- 3. _____
- 4. _____

- 4. Show care and safety in fuel handling and storage.

- 5. Describe three types of ignition systems.

- 1. _____

- 2. _____

- 3. _____

- 6. Explain why gasoline is an improper cleaning fluid.

- 7. List two acceptable cleaning fluids for small engines.

- 1. _____
- 2. _____

- 8. List and tell how three basic lubrication systems operate.

- 1. _____

- 2. _____

3. _____

- 9. List in order the steps of a general trouble-shooting procedure.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

- 10. Demonstrate that you can overhaul, inspect, and properly tune any small engine.

- 11. Demonstrate that you know how to test and clean spark plugs and glo plugs.



Pathfinder's Name

Teaching

1. What education is needed for teaching the following:
Elementary school _____

Secondary school _____

College _____

2. What is re-certification?

3. Interview at least two teachers with the following questions:
(Complete Chart #1 at least twice)
- a. Why did you choose to become a teacher?
 - b. What part of teaching do you like the best?
 - c. What part of teaching do you like the least?
 - d. What do you do to get ready for a school year?
 - e. What do you do to get ready for a school day?
 - f. What teacher-related activities do you do after school is out each day?
 - g. What are some qualities of a good teacher?
 - h. What are the responsibilities and duties of a teacher?
4. Explore the Bible and the book Education by Ellen G. White to learn what teaching methods Jesus used. Present a three-minute oral report on what you learned.
5. If you are 16 years old or younger, do the following for a minimum of 40 minutes per week for three weeks:
- a. Assist a teacher in designing and preparing a bulletin board.
 - b. Assist a teacher in preparing learning aids.
 - c. With the supervision of a teacher, teach a child or class at least one concept.
- Teacher assisted _____

How you helped _____

- ❑ 6. If you are older than 16 years, do three of the following:
 - a. Teach an adult's or children's Sabbath School class for a minimum of six weeks.
 - b. Teach in one day in each department of Vacation Bible School.
 - c. Teach two Honors from the Honors Handbook.
 - d. Assist in teaching requirements for one of the AY classes, culminating in investiture.
 - e. Teach at least one year in an elementary or secondary school or in a college.

Date completed _____

Instructor's Signature _____

Teaching Chart #1

Interview at least two teachers with the following questions:

Teacher interviewed _____

Teacher's specialty or level _____

Why did you choose to become a teacher? _____

What part of teaching do you like the best? _____

Why? _____

What part of teaching do you like the least? _____

Why? _____

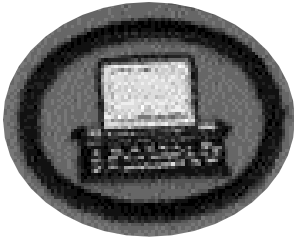
What do you do to get ready for a school year? _____

What do you do to get ready for a school day? _____

What teacher-related activities do you do after school is out each day?

What are some qualities of a good teachers? _____

What are the responsibilities and duties of a teacher? _____



Pathfinder's Name

Typewriting

- 1. Show how to clean, type properly and change ribbon on a typewriter.
- 2. Know the difference between a fabric and a carbon ribbon.
Fabric _____
Carbon _____
- 3. Identify the following parts of the typewriter and know their function:
Frame _____
Keyboard _____
Space bar _____
Backspace key _____
Shift keys and lock _____
Platen _____
Impression control _____
Margin stops _____
Paper release _____
Leverline-space lever _____
Line-finder control _____
Paper centering scale _____
Cardholder _____
Paper bail lever _____
Pitch selection lever _____
Margin release _____
- 4. Know how to set tabs for tabulation. Properly type a tabulated page with at least four columns.
- 5. Show how to center information horizontally and vertically on paper.

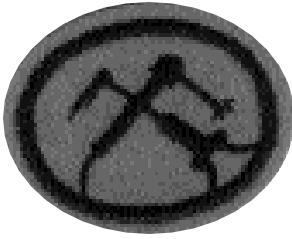
- 6. Show how to construct block and indented style letters.
- 7. Operate a typewriter at a speed of forty words a minute on new material for five minutes with no more than five errors.

Speed _____

Number of errors _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Welding

(Instructor Required)

- 1. Identify all parts of the following:
 - a. Welding and cutting torches
 - b. Oxygen and acetylene gauges and their differences
 - c. Oxygen and acetylene hoses and their differences
 - d. Oxygen and acetylene tanks and their differences
- 2. Explain the safe working pressures of oxygen and acetylene, as per your instructor's directions, for various procedures.

- 3. While blindfolded, demonstrate ability to hook up an entire oxyacetylene kit, including tanks, gauges, hoses, and torches, and light the same.**
- 4. As per your instructor's directions, weld two mild steel test plates (1/8 inch x 1 inch x 8 inches) (0.3 cm x 2.5 cm x 20.3 cm) in horizontal, and vertical positions.
- 5. Use a cutting torch and demonstrate your skill by making one 12 inches (30.5 cm) straight-line cut, one circle cut of at least 3 inches (7.6 cm) in diameter and one 3 inch (7.6 cm) star cut. The cuts are to be made on mild steel plate at least 1/4 inch (0.6 cm) thick.
- 6. Demonstrate your ability to braze a cast-iron object with at least 1/4 inch (0.6 cm) double bevel butt weld 2 inches (5 cm) long.
- 7. Explain the safety precautions and safety equipment normally used in electric welding in relation to eyes, hands, and exposed skin areas.

Why should the tank valves never be oiled?

8. Explain the difference between oxyacetylene and electric arc welding.

Oxyacetylene _____

Electric arc _____

9. Demonstrate ability to select from an electrode guide the proper amperage and electrode for various types and thicknesses of metal.

10. Demonstrate ability to weld flat, vertical, horizontal, and overhead on (1/8 inch x 1 inch x 8 inches) (0.3 cm x 2.5 cm x 20.3 cm) mild steel test plates.

Note: An instructor is a must. Welding is a very critical and serious skill to learn and is not a home-type course. Welding essentially takes the place of bolts and rivets, and if not properly done, is most dangerous. Example: A trailer hitch not properly bonded, or machinery exposed to the strain of pull or weight, is an invitation to disaster.

Note: ** This requirement demonstrates one's skill in working in darkness, such as in an emergency. All acetylene connection threads are left-handed, while all oxygen connection threads are right-handed.



Pathfinder's Name

Woodworking

1. Tell how the following processes are related to lumber and how each process is done:

Growing trees _____

Harvesting of trees _____

Milling _____

Curing _____

Seasoning _____

Grading _____

Sizing _____

2. Collect and label five different kinds of wood used in woodworking. Tell the advantages and disadvantages of each.

	Wood	Advantages	Disadvantages
1.	_____	_____	_____
		_____	_____
		_____	_____
2.	_____	_____	_____
		_____	_____
		_____	_____

3. _____

4. _____

5. _____

- 3. List the basic hand and power tools necessary to do woodworking. Know how to safely use each tool and how to keep it in proper working order, including sharpening, if applicable.

- 4. Explain the following joints:
Butt _____
Dado and groove _____
Dovetail _____
Dowel _____
Lap _____
Miter _____
Morist and tenon _____
Rabbet _____

- 5. Know the characteristics of and how to work with the following:
Hardboard _____

Particleboard _____

Plywood _____

- 6. Know at least two ways to finish the edges of plywood.
 1. _____
 2. _____

- 7. Demonstrate the proper technique of gluing and clamping wood.

- 8. Choose a plan for and complete an article of household furniture, such as a small table, footstool, writing desk, or bookcase. List the materials needed for your project.

Article completed _____

Materials needed _____

- 9. Know and use the proper steps in finishing a wood project with either natural finish or a stain.

Steps _____

- 10. Do two of the following:
 - a. Make a project with a door or lid with inset hinges.
 - b. Make a scale model of a house or building with a cutaway view showing the interior detail.
 - c. Assist in making and/or repairing wooden toys for needy children.
 - d. Make a project using dowel, miter, or mortise and tenon joints.
 - e. Make a project using curved cuts, or beveled or rounded edges.

Projects Completed 1. _____
2. _____

East Africa Division Honors

Africa Lore

Antelopes

Antelopes, Advanced

Paper Maché

Thatching



Pathfinder's Name

African Lore

1. Be able to name and locate at least ten different African tribes of the present day and name several outstanding features of each.

Tribes	Outstanding features
1. _____	_____ _____ _____
2. _____	_____ _____ _____
3. _____	_____ _____ _____
4. _____	_____ _____ _____
5. _____	_____ _____ _____
6. _____	_____ _____ _____
7. _____	_____ _____ _____
8. _____	_____ _____ _____

9. _____

10. _____

2. a. Select for study an African Tribe. (If you belong to an African Tribe, select one other than your own.)

Tribe Selected _____

- b. Find out detailed information on the tribe selected, in the following areas.

Eating Habits _____

Initiation ceremonies _____

Witch doctors _____

Living and worship conditions _____

Education _____

Burials _____

Money _____

Dress _____

Industry _____

- 3. Tell an African folk story bringing out its moral.

Date presented _____

- 4. Make a collection of at least 15 objects manufactured by African tribes (other than your own)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

Date completed _____

Instructor's Signature



Pathfinder's Name

Antelopes

1. Give the general characteristics of antelopes.

2. Give three size-groups of these animals, with two examples of each

Groups

Examples

1.	_____	_____

2.	_____	_____

3.	_____	_____

3. Be able to identify at least 15 different antelopes.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____

10. _____
11. _____
12. _____
13. _____
14. _____
15. _____

4. What do they eat?

How do they digest their food?

5. Name three ways in which one benefits from having these animals in the country where one lives.

1. _____

2. _____

3. _____

6. What are “false hoofs?” _____

Which members of this family do not have them?

7. Which antelopes are classed as rare South African animals now?

Where can they be seen, outside of the zoo and the museum?

8. What natural enemies do the antelopes have?

How do antelopes protect themselves and their young?

- ❑ 9. Which is:
 - The largest antelope? _____
 - The swiftest runner? _____
 - A good fighter? _____
 - A good jumper? _____
 - Chiefly nocturnal? _____
 - Called "the African Chamois"? _____
 - The national animal of the Union of South Africa? _____

❑ 10. Say which antelope you like to watch most. Tell five of its habits.

Antelope	Habits
1. _____	_____

Antelopes, Advanced

- 1. Give the order, and the scientific name of the family, to which the antelope belong.

- 2. Give the distinguishing characteristics of the different sub-families, with examples of each.

Sub families	Characteristics	Examples
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>

- 3. Which large antelope differs from most of the others in appearance?

What are some of its peculiar habits?

- 4. What is the function of musk glands in the antelopes?

Where are these glands situated on the gregarious types?

On the solitary types?

- ❑ 5. Which species could you expect to find in:
 - Bush, or reed beds, near water _____
 - _____
 - Arid regions? _____
 - _____
 - Open plains? _____
 - _____
 - Scrub and forest areas? _____
 - _____
 - The vicinity of rocky kopjes, or on hillsides? _____
 - _____

- ❑ 6. Describe the horns, in both sexes of each species, of 15 different antelopes.

	Antelope	Female	Male
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____

What is the structure of these horns?

Are there any deer in South Africa?

What is the structure of their horns?

7. Name at least 20 species of antelope that you have observed and can identify out-of-doors, not more than 5 of which are in captivity.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

8. What is a gazelle? _____

Where would you find this animal? _____

9. Name some diseases associated with wild bovies.

How are they transmitted?

Of what economic importance are they to man?

10. Know the game laws of your province.



Pathfinder's Name _____

Paper Maché

1. Name at least three kinds of bases upon which paper models may be shaped.

1. _____

2. _____

3. _____

2. There are two main types of paper maché:

a. Know how to prepare successful pulp

b. Know how to prepare the glue

3. Be familiar with all ingredients and know why they are used.

Ingredients

Used

4. Make, paint and varnish at least two articles from pulp.

Articles made

1. _____

2. _____

5. Make, paint and varnish at least two articles from paste and paper strips.

Articles made

1. _____

2. _____

6. Submit articles to examiner and have workmanship approved.

Signature of Examiner _____

Date completed _____

Instructor's Signature _____

East African Division
2002 Edition



Pathfinder's Name

Thatching

1. Make a list of the various tools needed for thatching, stating their uses, and show a “dekspaan” and a “needle” you have made.

Tools

Uses

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. State what materials are needed in erecting the framework of a roof ready for thatching.

Tell briefly how you go about erecting the framework of a rondavel.

3. Name the various materials required for thatching, including several kinds of thatching “grasses” and thatching “threads.” Show samples of these.

- ❑ 4. Answer the following questions on the preparation of thatching material:
When is the grass cut and how is it stacked for storing?

How is the grass “combed” and made ready for thatching?

How is thatching rope made?

What raw materials are used in your locality?

- ❑ 5. Can any shape of roof be thatched?

Which is the easiest roof to thatch?

What are some of the advantages of a thatched roof?

What are some of the things that damage thatch?

How would you protect a thatched roof against such?

- ❑ 6. Have some practical knowledge on how to thatch and demonstrate ability in laying a few short rows of thatch.

- 7. How many workers are needed in thatching a rondavel?

Describe how you would start thatching a rondavel?

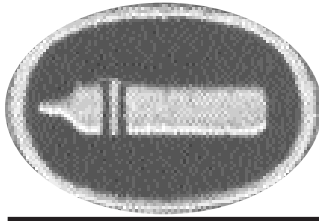
Tell, if possible demonstrate, how you would finish off:

(1) a round roof

(2) a gabled roof

Euro-Africa Division Index

Child Care (Babysitting)



Pathfinder's Name

Child Care (Babysitting)

- 1. Be able to look after a baby during several hours in the absence of its mother.
- 2. List all the precautions to be taken when preparing the baby's bottle; prepare it and give it to the baby.

- 3. Prepare, bath, change and dress the baby.
- 4. Prepare the baby's bed and put it to bed for the night.
- 5. Know how to weigh a baby and to fill in the weigh schedule form.
- 6. Explain why breast-feeding is superior to bottle-feeding.

- 7. What is weaning?

- 8. What is the fontanel (soft spot)?

At about what age does it disappear? _____

- 9. Interview staff at a local day care center regarding their organization and the help they offer to mothers.

Interviewed _____

Date _____

Date completed _____

Instructor's Signature _____

North American Division Index

Basketball
Bats
Bats, Advanced
Braiding
Braiding, Advanced
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Camp Safety, Advanced
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Community Assessment
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Copper Enameling
Copper Enameling, Advanced
Crisis Intervention
Digital Photography
Disaster Response
Drumming and Percussion
Drumming and Percussion, Advanced
Dutch Oven Cooking
Endangered Species
Genealogy
Genealogy, Advanced
Geocaching
Geocaching, Advanced
Glass Etching
Gold Prospecting
Gold Prospecting, Advanced
Heart and Circulation
Heredity
Hot Air Balloon
Hunger Relief
Indian Lore
Indian Lore, Advanced
Internet
Internet, Advanced
Lapidary
Letter Boxing
Letter Boxing, Advanced
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Lighthouses, Advanced
Mountain Biking
Paper Quilling
Paper Quilling, Advanced

Parade Float
Parade Float, Advanced
Peace Maker
Peace Maker, Advanced
Pinewood Derby
Pinewood Derby, Advanced
Plastic Canvas
Power Boating
Preach It
Preach It, Advanced
Refugee Resettlement
Rural Development
Sanctuary
Scrapbooking
Scrapbooking, Advanced
Skiing, Cross Country
Slow-Pitch Softball
Soccer
Soils
Tie Dye
Travel
Travel, Advanced
Tutoring
Unicycle
Urban Development
Wakeboarding
Whistles
Whistles, Advanced
Worms
Worms, Advanced



_____ Pathfinder's Name

Basketball

- 1. Know the basic rules of basketball.
- 2. What is the meaning of "Good Sportsmanship?"

- 3. Define the following terms:

Air ball _____

Backboard _____

Back court _____

Front court _____

Baseline _____

Block _____

Bounce pass _____

Double dribble _____

Dribbling _____

Fake _____

Fast break _____

Field Goal _____

Fouled out _____

Give and go _____

Inbound _____

Intentional Foul _____

Jump ball _____

The Key _____

Loose ball foul _____

Man to man _____

One and one _____

Perimeter _____
Pick _____
Press _____
Rebound _____
Shot clock _____
Steal _____
Team fouls _____
Trap _____
Traveling _____
Turnover _____
Zone defense _____
Center _____
Forwards _____
Guards _____
Jump shot _____
Lay up _____
Bank shot _____
Dunk _____
Hook shot _____
Free throw _____
Personal foul _____
Charging _____
Blocking _____
Technical foul _____
Three second violation _____
Five second rule _____
Ten second rule _____
Back court violation _____
Inbound violation _____
League _____

Three point shot _____

- 4. Demonstrate an understanding of the different skills required at each position.
- 5. Demonstrate reasonable skill in the following areas:
 - a. Shooting from the free throw line.
 - b. Shooting from different positions around the basket
 - c. Dribbling
 - d. Passing
- 6. Spend at least 4 hours helping a less skilled or younger player improve their skills.

Date _____

- 7. Play at least 5 games with family or friends. Show good sportsmanship during your practice and games.

Date of games _____

- 8. Write a one page report on a famous basketball player. Discuss why they are or are not a good Christian role model.
- 9. Discuss with your Pathfinder leader, pastor or teacher the problems facing a Seventh-day Adventist youth considering sports in Jr. High, High School and college. What alternatives are there that allows for continued activity in sports.

Discussion date _____

Person _____

- 10. Make a scale drawing of a basketball court properly laid out.

Basketball Instructor's Chart

Demonstrate	Point guard												
	Shooting guard												
	Center												
	Forward												
	Power Forward												
	Shooting from free throw line												
	Shooting from different positions												
	Dribbling												
	Passing												
	NAME												



Pathfinder's Name

Bats

1. Why are bats classified as mammals and not birds?

2. What is the main characteristic that separates bats from all other mammals?

3. What is the name of the order that bats belong to and what does it mean?

4. What are the largest and smallest bats and where do they live?

Largest _____

Live? _____

Smallest _____

Live? _____

5. How many different types of bats are there worldwide?

6. Bats are divided into 2 suborders. What are their names?

a. _____

b. _____

- 7. Which suborder of bats uses echolocation and which suborder use eyesight to find their food?

- 8. What is the diet of the Megabats?

- 9. What is the diet of the Microbats?

- 10. How many babies does a bat have each year and what are the babies called?

- 11. Find three Bible texts that mention bats.

Which text uses bats in an end time prophecy?

- 12. Do bats hibernate or migrate for the winter?

- 13. Name the parts of a bat.

- 14. How many insects can a microbat eat in an hour?

- 15. What are the 2 main benefits bats provide for man?

- 16. Build or purchase a bat box, know the best place to put it and install it at a home, church, or your school. Record for 3 months what kind and how many bats have made it their home.

Record for 3 months what kind and how many bats have made it their home.

Day 1	Day 8	Day 15	Day 22	Day 29
Day 2	Day 9	Day 16	Day 23	Day 30
Day 3	Day 10	Day 17	Day 24	Additional Notes:
Day 4	Day 11	Day 18	Day 25	
Day 5	Day 12	Day 19	Day 26	
Day 6	Day 13	Day 20	Day 27	
Day 7	Day 14	Day 21	Day 28	

Bats, Advanced

- 1. Earn the bat honor.
- 2. What are caves, attics, bridges, or tunnels where bats hibernate called?

- 3. Give 3 examples of colonizing bats.

- 4. Give 3 examples of solitary roosting bats.

- 5. What is meant by delayed implantation?

- 6. How long is the gestation period for bats?

- 7. What is bat guano and why was it important during the war of 1812 and the Civil War?

- 8. What disease can be contracted from large quantities of guano?

9. What is the life-span of a bat?

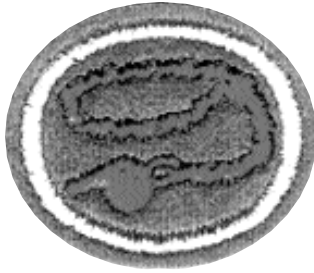
10. Do all bats have rabies?

11. How good is the vision of microbats and megabats?

12. What North American bat is pictured on the honor?

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Braiding

- 1. Make a three-strand braid, using hair, rope, or cord.
Date completed _____
- 2. Make a zipper pull or a key chain using the four-strand round or square braid.
Date completed _____
- 3. Make a four-strand hanger cover.
Date completed _____
- 4. Make a four-strand round braid lanyard.
Date completed _____
- 5. Know how to start and end all projects.

Date completed _____

Instructor's Signature _____

Braiding, Advanced

- 1. Have the Braiding Honor.
- 2. Make a six- or eight-strand zipper pull or key chain.
Date completed _____
- 3. Make a six- or eight-strand zipper pull or key chain showing zigzag technique by reversing direction of braid, or make a project showing the three-part inside or trick braid.
Date completed _____
- 4. Do one of the following:
 - a. Six-strand lanyard
 - b. Bookmark using at least six strands
 - c. Four-strand dog leash using twine or wire for a core to braid aroundProject _____
Date completed _____
- 5. Know how to start and end all projects.



Pathfinder's Name

Camp Safety

1. Why is it important to find out what the local laws are before starting a camp fire?

Where should you get that information?

2. Identify 3 reasons why a camp fire should never be left unattended.

1. _____

2. _____

3. _____

3. List 10 rules for fire safety to consider when camping.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

- 4. Identify the temperature the following foods should be kept at, and explain why this is important when camping:

Hot foods _____

Cold foods _____

- 5. List 5 things you can do to prevent animals from coming into your campsite.

1. _____

2. _____

3. _____

4. _____

5. _____

- 6. What safety precautions should you consider when building a latrine?

- 7. Make a list of items that should be in a “First Aid Kit” and inspect your Pathfinder Club's camping first aid kit and make recommendations of any missing items as applicable.

- ❑ 8. List 5 things to consider when practicing good hygiene at a campsite where there is no running water (ie showers, flush toilets, sinks, or faucets).
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
- ❑ 9. Demonstrate 3 ways you can purify water when camping.
 1. _____
 2. _____
 3. _____
- ❑ 10. Identify 2 types of fuel used for camp cooking and explain what precautions should be used when using each type of fuel.
 1. _____

 2. _____

Discuss 5 guidelines for safely handling the following camping items:

knives _____

axes _____

saws _____

hatchets _____

machetes _____

- ❑ **11.** Assist your club or conference leadership in a campsite safety inspection using the current Adventist Risk Management Pathfinder Camp Safety Inspection Form or its equivalent. (available for download from adventistrisk.com) http://www.adventistrisk.org/pdfs/camp_inspectionform.pdf. Be able to briefly explain the score/report given concerning the safety of the campsite.

Date completed _____

Instructor's Signature _____

Camp Safety, Advanced

- 1. Earn the following honors if not already earned:
 - a. Camping Skills I-IV
 - b. Camp Safety

- 2. What is meant by "Pathfinders are a sacred trust" and how does camp safety support that aspect of ministry in the church?

- 3. Train a Pathfinder Unit or its equivalent in the Camping Safety Honor
- 4. Conduct 5 camp site inspections (on at least two camping experiences) using the current Adventist Risk Management Pathfinder Camp Safety Inspection Form or its equivalent. (available for download from [adventistrisk.com](http://www.adventistrisk.com))
http://www.adventistrisk.org/pdfs/camp_inspectionform.pdf



Pathfinder's Name

Christian Drama

- 1. Memorize and apply 1 Corinthians 10:31.
- 2. Describe each of the following categories of Drama.

Human Videos _____

Worship Skits/Drama Sketches

Pantomime _____

Dramatic Reading/monologue, duet, or group

Musical/Drama _____

- 3. Describe how each of these areas of Drama listed above can be used to reach people for God.

Human Videos _____

Worship Skits/Drama Sketches

Pantomime _____

Dramatic Reading/monologue, duet, or group

Musical/Drama _____

- ❑ 4. Know the following rules for acting.
 - a. Never turn your back to the audience.
 - b. Speak slow during a line and fast between the line (no dead space between characters speaking)
 - c. Enunciate and pronounce words clearly (unless it states differently in the stage directions)
 - d. No dairy products or sweets (chocolate, soda pop) before speaking lines or singing.
 - e. Keep in character (don't laugh or smile unless stated in stage directions)
 - f. Stay in your space (unless stated to move in stage directions)
 - g. Do not block other characters from the audience.
 - h. Use your hands and eyes.
 - i. There is no such thing as over acting.
 - j. Nothing blocking your mouth (gum, etc. Unless other wise directed)

- ❑ 5. Know and understand why the following rules for pantomiming are important. Practice these rules to a simple Bible story.
 - a. Pantomiming used as an outreach ministry should never be a guessing game. It should clearly state the theme.
 - b. It is important to remember that in dramatic work, the thought comes first. Let your eyes respond first, then the rest of your face and head, and finally, the rest of your body. This is called motivated sequence.
 - c. Your actions should always be simple and clear cut.
 - d. Every movement and expression should always be visible.
 - e. There should be a reason to every gesture or movement.
 - f. Only one gesture or movement should be made at a time.
 - g. Rehearse until you have created a clear-cut characterization.

- ❑ 6. Know the following acting terminology.

Ad-lib

backstage

cross

cue

downstage

upstaging

Exit

holding it

left and right

set

tempo

upstage

getting up in a part

Left center and right center

- 7. From the categories listed in #2, plan and perform two from the categories of Drama in a worship setting, church, or youth group.
- 8. As a group create one drama presentation and perform it.



Pathfinder's Name

Community Service

1. Read the following Bible texts and explain what they teach about the role God expects each Christian to play in meeting the needs of the poor and suffering in the community:

Isaiah 58:3-12 _____

Luke 10:25-37 _____

Matthew 25:31-46 _____

2. Read Chapter 54 (entitled "The Good Samaritan") from *The Desire of Ages* by Ellen White and write a list of five key points in the chapter.

1. _____

2. _____

3. _____

4. _____

5. _____

3. Explain to your instructor the following:

The name of the local Adventist organization that serves the poor and suffering in your town or metropolitan area. What kinds of services does it provide?

What the letters ADRA stand for. Give a brief explanation of each word represented, and explain the difference between "development" and "relief"

- 4. Pack an ADRA box, using the proper procedures for contents, method of packing, and labeling of the box.
- 5. Meet with the Adventist Community Services leader in your area and ask about projects that your Pathfinder unit or class might be able to accomplish that would help meet needs in your community.

- 6. Plan a community service project with your Pathfinder unit or class and complete it.

Service Project _____

- 7. Complete at least 10 hours of volunteer service, including both time invested in the project mentioned in requirement number six and time donated to other community service activities.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Copper Enameling

1. Know the difference between low-temp and high-temp enameling.

Low-temp _____

High-temp _____

2. Name the materials on which the low-temp process can be used.

3. What is the proper method of cleaning items to be enameled?

Why is it important to clean items to be enameled?

4. How is copper finished to prevent tarnishing?

5. Name the tools used in enameling.

6. What heat sources can be used for low-temp enameling?

What safety precautions should be followed?

7. How are pin backs and magnets attached to the back of metal pieces?

Pin backs _____

Magnets _____

8. Make at least five items using the following techniques:

a. Swirling

d. Mosaic

b. Stencil

e. Scraffito

c. Threads

Items made

1. _____

2. _____

3. _____

4. _____

5. _____

NOTE: The high-fire firing for this honor need not be done by the candidate.
This honor may be earned using either the high-fire or the low-fire enameling.

Date completed _____

Instructor's Signature _____

Copper Enameling, Advanced

- 1. Have the Copper Enameling Honor.
- 2. Explain the use of a trivet.

- 3. What materials can be used to decorate enameled pieces for the applique technique?

- 4. Use four of the following techniques in completing requirement 5:
 - a. Counter enameling
 - b. Applique
 - c. Cloisonne
 - d. Dry painting
 - e. Scraffito
- 5. Make four of the following projects:
 - a. Holiday decoration
 - b. Kitchen decoration
 - c. Foil flower
 - d. Pin or stick pin
 - e. Metal bookends
 - f. Metal switch plate
 - g. Three-dimensional item
 - h. Similar item of your choice

Projects made

- 1. _____
- 2. _____
- 3. _____
- 4. _____



Pathfinder's Name

Crisis Intervention

- 1. Be at least in the 10th grade.
- 2. Explain how Christ encouraged people in crisis in at least two of the following Bible stories. Identify the nature of the crisis or human needs in each story that you explain.

John 8:1-11 _____

Matthew 18: 1-6 _____

John 4: 1-26 _____

John 1:35-42 _____

Mark 2:13-17 _____

Acts 9 _____

- ❑ 3. Describe for your instructor some of the human needs and crisis situations that teenagers in your community face today. Describe some of the crisis situations that families face. This may be done in a group discussion setting.

- ❑ 4. Discuss your own motives for wanting to help your friends when they face personal or family crisis.

What about strangers? This may be done in a group discussion setting.

- ❑ 5. Describe the types of human needs and give a real-life example of each.

- 6. Explain the steps in crisis intervention process and apply each step to a case study supplied by your instructor.

- 7. Demonstrate a grasp of basic listening skills by conducting an interview of at least 30 minutes duration. This interview must either be observed by an observer who can recognize listening skills, or taped for review by your instructor. The interview does not have to be with a person who is in crisis, but it must be a real conversation not pretend or role-playing.

- 8. Explain how to make a referral to a professional counselor or pastor.



Pathfinder's Name

Digital Photography

- Explain the following:

What are the principles of digital camera construction and how a digital camera works? _____

What are the effect of light on an image sensor?

How color images are created from the BW image the sensor captures?

What the camera lens does; what focal length means?

How are lens aperture and depth of field related?

Describe pixels, image resolution, and image size?

What are the two types of image compression?

2. Name and describe three types of image formats.

1. _____

2. _____

3. _____

3. Give the principle uses of photography:

4. Take pictures illustrating at least eight of the following techniques. Use comparison pictures for illustration.

- a. Framing
- b. Camera Steadiness
- c. Direction of lighting - front, side, or backlighting
- d. Quality of light - shade, sunlight, and time of day
- e. Rule of thirds
- f. Angle - eye level, high and low level
- g. Level horizon
- h. Distance from subject - fill the frame
- i. Use of leading lines
- j. Correct exposure - underexposed, overexposed, and correctly exposed
- k. Use of flash - proper distance and reflective objects

- 5. Learn how to place photos in PowerPoint. Create a PowerPoint presentation showing the pictures you took using the above techniques.
- 6. Using a photo editing program on a computer, show ability to crop, color correct, sharpen, and adjust brightness/contrast to photos.
- 7. Complete at least three creative photographic projects in a photo editing program; such as a CD cover, a photo scrapbook page, a collage, etc.
- 8. Have a basic understanding of file organization techniques.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Disaster Response

1. Explain the type of damage most likely to occur to homes and individuals for each of the following major types of disaster, and indicate for each in which parts of the world does it occur most frequently:

Hurricane/Typhoon _____

Tornado _____

Floods _____

Earthquake _____

Wildfire _____

Chemical spill _____

Nuclear accident _____

- 2. Describe briefly the types of services provided to survivors of disasters in your nation by ADRA or Adventist Community Services (ACS).

- 3. View a video report from ADRA or ACS concerning a recent disaster response project and discuss with your instructor, Pathfinder Club counselor, teacher or group the key roles that would be necessary in the disaster response team in order to accomplish the work described in the video.

- 4. Complete the official ADRA introductory training unit provided by your national ADRA office or ACS organization.

- 5. Describe at least one of these other major disaster response organizations and the kind of relationship that ADRA or ACS has with it:

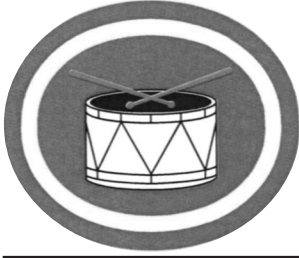
Red Cross _____

UNHCR _____

Food banks _____

- 6. Explain the role of government officials when a disaster occurs, identify the key government agency in your nation that manages emergency response, and describe the nature of the relationship that your ADRA or ACS country office has with this government agency.

- 7. Find a Bible text that you might use to comfort and encourage an individual of your same age and gender who has just experienced the total loss of their home, and tell why you chose that text.



Pathfinder's Name

Drumming & Percussion

- 1. Write a one page paper demonstrating your knowledge of how a drum corps can be used to minister within your: a. local church b. community
- 2. What are the four families of rudiments?
 1. _____

 2. _____

 3. _____

 4. _____

- 3. Be able to name five rudiments from each of the four families of rudiments.
 1. _____

 2. _____

 3. _____

 4. _____

 5. _____

- 4. Demonstrate ability to keep in step with the drum corps by taking part in at least one outreach program. (ex. Pathfinder Day, Conference or Local church sponsored event)

- ❑ 5. What is the difference between drum carriers and drum straps?

Demonstrate with drum equipment in a formation.

- ❑ 6. What are the seven essential rudiments? Why are they essential?

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

- ❑ 7. What is the difference between playing open vs. closed?

Open _____

Closed _____

- 8. Using the open/closed method, demonstrate your knowledge of the seven essential rudiments. Execute: Open to Closed to Open
- 9. What is the difference between traditional style and matched style stick holding?

Traditional _____

Matched _____

Demonstrate each style by playing a sequence consisting of no less than three rudiments.

- 10. What is the difference between drumsticks used for a drum corps and those used for a percussion drum set?

- 11. What are the sections that make up a drum corps?

- 12. Based on the previous question, what purpose does each section serve?

13. Show the various types of protective devices used to secure drum corps equipment.

14. What are the various types and sizes of drumsticks used for a drum corps?

15. Know what tools and equipment used for drum practice sessions.

Drumming & Percussion, Advanced

- 1. Have the Drumming & Percussion Honor.
- 2. Demonstrate ability to keep in step with the drum corps by taking part in at least three outreach programs. (ex. Pathfinder Day, Conference or Local church sponsored event), in which one must be a parade no less than? of a mile.

1. _____

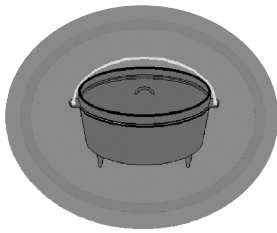
2. _____

3. _____

- 3. Know the Standard 26 American Drum Rudiments.

- 4. Demonstrate knowledge of the rudiment families by free styling for at least 60 seconds. Your routine must contain at least 3 rudiments from each rudiment family.
- 5. Discuss the proper steps in tuning a drum. Demonstrate by tuning a drum from any section of your drum corps.
- 6. Demonstrate ability to maintain drum equipment by replacing and retuning a drumhead from any section of your drum corps.
- 7. What types of fluids or solvents are used to clean drum equipment?

- 8. Demonstrate ability to secure drum equipment in storage or when traveling.
- 9. Know the area of the drumhead to strike from each section of your drum corps.
- 10. Demonstrate ability to keep in step with the drum corps (with equipment) by executing the following commands:
 - Forward March
 - Right Flank March
 - Left Flank March
 - Eyes Right
 - Attention
 - Right Face
 - Left Face
 - Parade Rest
 - At Ease
 - About Face
 - To the Rear March
 - Present/Order Arms
- 11. Demonstrate some useful exercises used by drum corps. Be able to explain their purpose.
- 12. Using rudiments, create a drum cadence not previously performed. Each section of the drum corps must execute a part of the cadence.
- 13. Demonstrate the difference between full-step marching vs. half-step marching with regard to playing cadences.



Pathfinder's Name

Dutch Oven Cooking

- 1. Earn the Cooking honor and the Camping Skills 3 honor.
- 2. Give a brief history of Dutch ovens and their role in American history.

- 3. Know the difference between a bread oven, a stew/meat oven, pot/stove top oven and a camp oven.

Bread oven _____

Stew/meat oven _____

Pot/stove top oven _____

Camp oven _____

- 4. In what way are ovens sized?

- 5. Know and demonstrate fire and Dutch oven handling safety and the proper use of equipment.
- 6. What types of fuels are used to cook with an oven?

- 7. What are the advantages of charcoal over wood as fuel?

- 8. How do you control temperature?

- 9. What do ashes do to the efficiency of the coals?

- 10. If using wood, what types are best for cooking?

- 11. Demonstrate how to properly season a new Dutch oven.
- 12. Demonstrate how to properly clean a Dutch oven after each use.
- 13. Demonstrate how to properly transport Dutch ovens.
- 14. Demonstrate how to properly store a Dutch oven for a short term and long term.

- 15. Cook one of each category using Dutch ovens:

- Soup/Stew
- Casserole
- Vegetable
- Bread
- Dessert

- 16. Cook with the lid only as a griddle.

- 17. Name the six different ways to cook in a Dutch oven.

- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____

- 18. What is meant by stack cooking?



Pathfinder's Name

Endangered Species

1. Define the following terms.

Endangered _____

Extinct _____

Habitat _____

Biomes _____

Food chain _____

Poacher _____

2. Write Genesis 1:28 in your own words.

3. List four factors that have caused animals to become endangered.

4. Name four animals that are now extinct.

- ❑ 5. List four things that are being done to save endangered animals.

- ❑ 6. List four activities you can do to help wild animals.

- ❑ 7. List ten endangered animals. Tell where they live and why they have become endangered.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

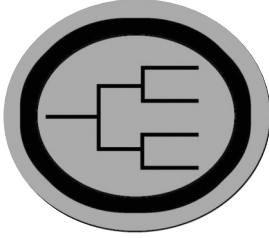
10. _____

- ❑ 8. Do two of the following activities:
- a. Visit a zoo or animal preserve that has one or more endangered animals in residence. List what animal(s) you saw, where they normally live, and why they have become endangered.
 - b. Watch a video about an endangered animal. List what animal(s) you saw, where they normally live, and why they have become endangered.
 - c. Choose an endangered animal and write or give orally a short report about it. Tell where it normally lives, why it has become endangered, what is being done to save it, and any other special details about this particular animal that you have learned.
 - d. Make a scrapbook about endangered animals. This may include newspaper articles, stories, pictures, stamps, or drawings. This may be a group project.
 - e. Do an environment circle. With a group of 10-20 persons, form a loose circle with people evenly spaced within. Have each person represent something in the environment such as animals, grass lands, forests, etc. Then take a spool of heavy thread or string and connect each person to others in the circle. Have the leader start cutting the connections and start taking individuals out of the circle and see how the remaining persons are affected by the loss. Help the group to see that each thing in nature is very necessary to the survival of everything else in nature.

Date completed _____

Instructor's Signature _____

**Endangered Species
2002 Edition
Updated 2004**



Pathfinder's Name

Genealogy

1. Define the following words:

genealogy _____

ancestor _____

descendant _____

spouse _____

sibling _____

2. Read the genealogy of Christ

Be able to tell where it is found in the New Testament

Write out the genealogy of Christ – beginning with Adam

3. List five ways to obtain family genealogy information

1. _____

2. _____

3. _____

4. _____

5. _____

- 4. Know at least three societies that help with genealogy research
 - 1. _____
 - 2. _____
 - 3. _____

- 5. Learn four steps important to genealogy research
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____

- 6. What is the purpose of documentation?

- 7. Define a primary source versus a secondary source for documentation.

- 8. Prepare a four-generation family chart – beginning with your self
- 9. List ways to record your genealogy information.

- 10.** Research your family history by talking/writing to your oldest living relative

Ask the following:
first memory

When and where you were born?

First church you remember attending?

Names of schools, and location, you attended

Where you lived at age ten and age fourteen

From what country did our ancestors emigrate?

Where and when were you married

If you had children please give their names, place and date of birth

Write a thank you to your relative for their time and include a photo of yourself and ask them if they would be willing to share a copy of an older family photo with you.

- 11.** Make a historical record of your life including:

- a. genealogical chart
- b. Records that pertain to your life
- c. Pictures
- d. Stories
- e. Share this with your group/club/school

- 12.** Visit a City/County Library – Genealogy Section (or other Genealogy Research Center) and write a paragraph on your visit including:

- a. Types of information available
- b. Any New information you discovered about your family

- 13.** Visit a cemetery and learn by copying the headstones:

- a. The names of three different families
- b. The dates of birth and death for these family members
- c. The average length of life for these family members

- 14.** Check with your local cemetery officials to learn how upkeep is done and ask them how you can help with clean-up in a cemetery in your area. Then do it!

Genealogy, Advanced

- 1. Have the Genealogy Honor
- 2. Define a primary source versus a secondary source for documentation.

- 3. What is the purpose of documentation?

- 4. Demonstrate a census extraction for one branch of your family from six of the following census: (for NAD find year of immigration and list the country from where they immigrated)

- a. 1840
- b. 1850
- c. 1860
- d. 1870
- e. 1880
- f. 1900
- g. 1910
- h. 1920

- 5. Show a pedigree chart you have filled out for 7 generations. List the information you have been unable to learn and what efforts you have made to locate this information.

- 6. Show 42 family group records you have filed out and the documentation notes to go with the family group record.
- 7. Find military records/pension records on one of your family members. If your family has none, then show military/pension records on any person.
- 8. Show vital records you have obtained for one person from item # 5 including:
 - a. birth
 - b. marriage
 - c. death
- 9. Show a copy of 3 obituaries on relatives with documentation where you found them.
- 10. List four web sites/or libraries where you have been able to locate information for your family research.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
- 11. Where in the Bible does it say not to spend time on fables and endless genealogies?

What does the Seventh-day Adventist Commentary list as the reason for this advice?



Pathfinder's Name

Geocaching

1. Define Geocaching.

2. What is a GPS receiver?

3. Demonstrate 2 ways of finding the location of a Geocache in your area on a Geocache website.

4. Demonstrate entering the latitude and longitude coordinates into the GPS to find a Geocache in your area.

5. Define the following terms

Traditional cache _____

Micro-cache _____

Virtual-cache _____

Multi-level cache _____

Travel Bug _____

Geomuggle/muggle _____

Geocaching, Advanced

- 1. Have the Basic Geocaching Honor
- 2. Briefly describe the origin of the global positioning satellites? What is their history—when and how did they get there? By whom?

- 3. Define latitude, longitude. What is meant by degrees, minutes, seconds?

- 4. Complete two or more of the following:
 - a. Establish and maintain a new geocache in your area for at least 6-months.
 - b. Send out and follow a TB (travel bug) for 6 months.
 - c. Find 2 travel bags and follow for 6 months.
 - d. Participate in a geocache meeting or event in your area (attend).

- 5. What are the laws/rules/guidelines for placing caches in the following locations?

State Parks National Park Service _____

Roads and Railroad Right-of-Ways _____

Placing caches while traveling _____

Wilderness Areas while traveling _____

USDA Forest Service _____

- ❑ 6. Find and record at least 18 geocaches; include:

Traditional cache with 3-star difficulty.

One Multi-level.

One virtual.

One micro.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

15. _____

16. _____

17. _____

18. _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Glass Etching

1. Name the tools and items needed for Glass Etching.

2. Name the eleven steps of Glass Etching.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____

3. What is the technique of applying velvet etch?

4. Make a project on clear glass.

- a. Lettering or verses
b. Flowers, animals, or people.

Project made _____

5. Make a project on a mirror. Include the following:

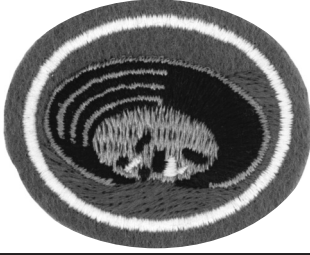
- a. Lettering, verses, flowers, animals, or people.
b. Finish by framing around mirror with colored tape.

6. Make a project on a glass, jar, or oval object.

Project made _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Gold Prospecting

1. Create a list of equipment used for gold panning. Describe each item and tell what it is used for. The list should include at least the following.

Gold Pan _____

Classifier _____

Snuffer Bottle _____

Shovel _____

Pick _____

Bucket _____

Trowel _____

Pry bar _____

Rock hammer _____

Crevice Tool _____

Drinking Water _____

2. Define the following:

Pay Dirt _____

Quartz _____

Pyrite _____

Blond Sand _____

Black Sand _____

Placer _____

Lode _____

Nugget _____

Flake _____

Mercury (historical use) DO NOT USE TODAY _____

Dust _____

Specific Gravity _____

Wet and Dry Panning _____

Gold Fever _____

Troy Pound _____

Troy Ounce _____

Penny weight (dwt) _____

Grain _____

- 3. What are the following identifying characteristics of Gold.

Specific Gravity _____

Color of streak _____

Color _____

- 4. Where are some good places on a river or stream to look for gold?

- 5. Make a timeline containing at least 15 items about the history of gold prospecting from 1600 until the present day, including the following rushes: California Gold Rush, Klondike/Yukon Gold Rush, Witwatersrand Gold Rush and the Victorian Gold Rush.

- 6. Learn about gold panning by doing one of the following:

- a. Do some gold panning. (preferred).
- b. Practice panning using flattened lead or tungsten shot mixed with sand (preferably from a river bank).

- 7. Look up the following verses in the Bible and discuss them in relation to prospecting for gold.

Matthew 13:44-46 _____

Matthew 6:19-21 _____

Date completed _____

Instructor's Signature _____

Gold Prospecting, Advanced

- 1. Have the Gold Prospecting Honor.
- 2. Describe the following types of prospecting equipment.

Sluice box _____

Rocker box _____

High banker _____

Bucket dredge _____

Suction dredge _____

Dry washer _____

Trommel _____

Beach box _____

Metal detector _____

Jig _____

Shaker table _____

- 3. What government requirements, if any, are associated with the equipment listed in number 2 above?

Sluice box _____

Rocker box _____

High banker _____

Bucket dredge _____

Suction dredge _____

Dry washer _____

Trommel _____

Beach box _____

Metal detector _____

Jig _____

Shaker table _____

- ❑ 4. What are the advantages or disadvantages to the equipment listed in number 2 above?

Sluice box _____

Rocker box _____

High banker _____

Bucket dredge _____

Suction dredge _____

Dry washer _____

Trommel _____

Beach box _____

Metal detector _____

Jig _____

Shaker table _____

- 5. Use at least two of the types of equipment listed in number 2 above to prospect for gold.
- 6. Pathfinders are supposed to take only pictures and leave only footprints, but prospecting requires moving rocks and digging large holes. How can you reconcile these two conflicting requirements?

Date completed _____

Instructor's Signature _____

Heart and Circulation

1. Describe the basic function of the following parts of the circulatory system:

heart _____

blood vessels _____

blood _____

lungs _____

2. Describe the major difference between arteries and veins.

What is a capillary and what is its function?

- 3. Identify two locations for measuring your pulse. Demonstrate your ability to accurately take someone's pulse.

- 4. Record your resting pulse rate, then exercise strenuously (ie jog, swim laps, climb stairs, etc.) for 10 minutes. Retake your pulse immediately after exercising, and then again after five minutes. Do this each day for one week recording your results on a chart or a graph. Did the exercise effect your heart rate?

- 5. Make a simple stethoscope and listen so someone's heart beat.

- 6. List at least five things you can do to keep your heart healthy. Put these into practice if you have not been doing so already.

1. _____
2. _____
3. _____
4. _____
5. _____

- 7. What is cholesterol and how is it related to arteriosclerosis?

- 8. What is a heart attack and what are its symptoms? How can CPR help?

9. What is an ECG and how is it used by a doctor?

10. Find five verses in the Bible that refer to your heart. Memorize two of them.

1. _____
2. _____
3. _____
4. _____
5. _____

Date completed _____

Instructor's Signature _____

Record for 1 week your resting heart rate then exercise strenuously (ie jog, swim laps, climb stairs, etc.) for 10 minutes. Retake your pulse immediately after exercising, and then again after five minutes. Do this each day for one week recording your results on a chart or a graph. Did the exercise effect your heart rate?

Day 1 Resting Exercise Heart rate Heart rate
Day 2 Resting Exercise Heart rate Heart rate
Day 3 Resting Exercise Heart rate Heart rate
Day 4 Resting Exercise Heart rate Heart rate
Day 5 Resting Exercise Heart rate Heart rate
Day 6 Resting Exercise Heart rate Heart rate
Day 7 Resting Exercise Heart rate Heart rate



Pathfinder's Name

Heredity

1. What is meant by the term “heredity”?

2. Draw a picture of an animal cell and label the following parts: Cell membrane, cytoplasm, nucleus, nuclear membrane, ribosomes

3. What is a chromosome and where are they located?

What is a gene and where is it found?

4. What is meant by the term “allele”?

How does a dominant allele differ from a recessive allele?

Determine which allele you have of the following genetic traits:

Widow's peak _____

Free earlobe _____

Dimples _____

Curved Thumb _____

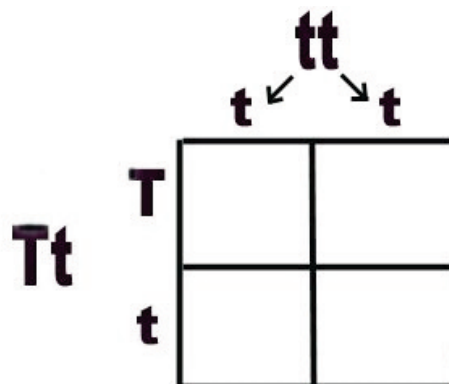
Bent pinky _____

Digit hair _____

Rolling tongue _____

Second toe longer _____

Using a punnet square, predict the ratio of offspring produced from these monohybrid crosses: TT (tall) crossed with tt (short), Tt (tall) crossed with Tt (tall), Tt (tall) crossed with tt (short)



- ❑ 5. What does the process of mitosis accomplish?

Draw a sequence of cells that shows the process of mitosis including: prophase, metaphase, anaphase and telophase.

Briefly explain how the DNA in the chromosomes is copied during this process.

- ❑ 6. What does the process of meiosis accomplish and how does it differ from mitosis?

Draw a sequence of cells that shows the process of meiosis including: prophase I & II, metaphase I & II, anaphase I & II and telophase I & II.

Do the cells resulting from meiosis remain haploid? Explain.

- 7. Describe how DNA encodes the specific proteins that result in genetic traits. Demonstrate your knowledge of this process by using diagrams or paper models.

- 8. What is a mutation? Using the diagrams or models created in question 7 to illustrate the effect of a mutation on the genetic trait.

- 9. Know at least five genetic disorders and tell a story about a famous person or someone that you know who has had one of these disorders.

1. _____

2. _____

3. _____

4. _____

5. _____

- 10. Is Biological Heredity the only factor contributing to your character, i.e., what makes you who you are?

- 11. Find 3 statements from Ellen Whites writings that relate to the previous question

1. _____

2. _____

3. _____

4. _____



Pathfinder's Name

Hot Air Balloon

1. State the role each of the following played in the development of flying balloons.

Joseph Michel Montgolfier and Jacques-Etienne Montgolfier

Jean Francois Pilatre de Rozier and Francois Laurent Marquis d'Arlandes

Jacques Alexandre Cesar Charles and Nicolas Louis Robert

Ben L. Abruzzo, Maxie L. Anderson, and Larry Newman

Bertrand Piccard and Brian Jones

2. Cite the principle of Archimedes, and briefly describe how it applies to each of the following:

A piece of cork floating in a bowl of water

A ship floating in the ocean

A hot air balloon floating in the atmosphere

- 3. Using a textbook of Chemistry, or a reference book of scientific tables, draw up a simple table showing the composition of air by weight and by volume.

- 4. Draw up a simple table showing a comparison of the atomic number, atomic weight, and density of hydrogen, helium, nitrogen, and oxygen.

- ❑ 5. Name two gases that are used in flying gas filled balloons.
 1. _____
 2. _____

- ❑ 6. Explain how heat/temperature affect the density of air, and how this applies to flying hot air balloons.

- ❑ 7. Explain the role of each of the following in the structure and flying of a hot air balloon.
Envelope _____

Support structure _____

Throat _____

Fuel source _____

- ❑ 8. Name two materials that may be used for the envelope of a hot air balloon, and compare the advantages each cords because of its properties.

- 9.** Describe how flying balloons have served a useful function in
 Military campaigns _____

 Scientific research _____

- 10.** At what time of the day do most sport balloon flights take place? Why?

- 11.** Describe how a pilot controls the vertical movement of
 A hot air balloon _____

 A gas filled balloon _____

- 12.** Describe how a pilot controls the lateral or horizontal movement of a
 flying balloon.

- 13.** Build to completion one model hot air balloon (or two if working in
 pairs).
- 14.** Successfully launch, fly, and recover the model hot air balloon(s) which
 you have built.



Pathfinder's Name _____

Hunger Relief

- 1. View an ADRA video on the topic of world hunger and discuss with your Pathfinder Club unit or class the methods shown in the video which ADRA is using to combat hunger.
- 2. Interview the person who directs the community food pantry in your local church or another local church in your area. Ask this person about the types of people they serve, what causes food needs in the community, and how they meet these needs. Take notes during the interview.
- 3. Visit a food bank and talk with the staff, and then explain to your instructor how the food bank gathers donated groceries and provides supplies to food pantries, soup kitchens, etc.
- 4. Describe in an essay of at least 500 words the causes of hunger in each of the following situations:
Developing nations overseas
Inner-city and other disadvantaged areas in this country

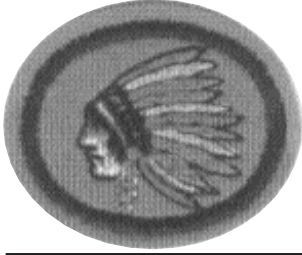
Alternate requirement: Make a presentation of at least 10 minutes during a Sabbath School program, Pathfinder Club Devotional, to a school assembly or civic club on the same topics.

Alternate requirement: Create a video tape, slide and sound show, or presentation software production on the same topics and show the production to a Sabbath School group, school assembly or civic club.
- 5. Collect at least 50 non-perishable food items for the community food pantry in your local church or the nearest Adventist Community Services center.
- 6. Volunteer in a soup kitchen for at least two meals, This can be done as a group project with others in your Pathfinder Club or school. If there is no Soup Kitchen in your area, prepare and distribute six sack lunches to the needy or homeless.

Date completed _____

Instructor's Signature _____

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Pathfinder's Name

Indian Lore

- 1. Name five uses made of natural materials by the Northwest Indians.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____

- 2. Name five uses made of the yucca plant by the Southwest Indians.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____

- 3. Name five uses made of the birch tree by the Eastern Woodland Indians.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____

- 4. Know 15 plant foods introduced to us by the Indians. Include four plant names used today.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
 - 7. _____

- 8. _____
- 9. _____
- 10. _____
- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____

5. Describe Indian stalking and tracking.

Stalking _____

Tracking _____

6. Name five rocks and/or minerals and uses made of them by the Indians.

Rocks/Minerals

Uses

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

7. Explain one way in which arrowheads were made by the Indians.

8. Define pictograph.

What are Indian petroglyphs and where can you find them?

9. Describe the use of seashells by the Indians.

10. Name at least ten materials used in making Indian arts and crafts.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

11. Make a craft item, using any of the materials named in requirement nine (9).

Craft made _____

Indian Lore, Advanced

- 1. Have the Indian Lore Honor.
- 2. Know and have a list of at least 40 foods introduced to us by the Indians of North and South America.
 - 1. _____ 21. _____
 - 2. _____ 22. _____
 - 3. _____ 23. _____
 - 4. _____ 24. _____
 - 5. _____ 25. _____
 - 6. _____ 26. _____
 - 7. _____ 27. _____
 - 8. _____ 28. _____
 - 9. _____ 29. _____
 - 10. _____ 30. _____
 - 11. _____ 31. _____
 - 12. _____ 32. _____
 - 13. _____ 33. _____
 - 14. _____ 34. _____
 - 15. _____ 35. _____
 - 16. _____ 36. _____
 - 17. _____ 37. _____
 - 18. _____ 38. _____
 - 19. _____ 39. _____
 - 20. _____ 40. _____
- 3. Participate in a meal using as many Indian foods and cooking methods as possible.

- ❑ 4. Name five drugs or medicine plants used by the Indians.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

- ❑ 5. Discuss the Indians of your area with regard to:
 - a. Tribes located there
 - b. Homes and clothing
 - c. Native crafts performed, such as basketry, pottery, mats, etc.
 - d. Religious practices
 - e. Form of Government

- ❑ 6. Name ten articles used by the Indians in their religious ceremonies.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 7. _____
 8. _____
 9. _____
 10. _____

- ❑ 7. Explain two methods of mounting and displaying arrowheads.
 1. _____
 2. _____

- ❑ 8. Explain one method of restoring and mending damaged arrowheads, ollas, blankets, and baskets.

Arrowheads

 1. _____

Ollas

 1. _____

Blankets

1. _____

Baskets

1. _____

9. Name and locate at least ten different tribes of the present day and tell for what each is noted.

Tribes

Noted for

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

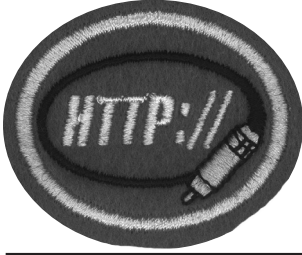
10. Experiment with plant dyes as used by the Indians and try to obtain at least two shades of color.

Colors/Shades

1. _____

2. _____

11. Do one of the following:
- a. Visit an Indian museum
 - b. Visit Indian ruins or mounds
 - c. Make a personal visit with an Indian
 - d. Visit an Indian village or reservation



_____ Pathfinder's Name

Internet

1. Define the following terms:

Internet _____

World Wide Web (WWW) _____

Chat Room _____

Download _____

Upload _____

Website _____

Virus* _____

- ❑ 2. Define the following terms and give examples of each:

mail _____

Web browser _____

IRC/IM (Instant Messenger) client _____

Streaming _____

Search Engine & Search Directories _____

Antivirus software _____

Firewall _____

- ❑ 3. Complete one of the following:

a. Write a brief 250-300 word history of the Internet.

b. Present a 2-3 minute talk concerning the history of the internet.

Regardless of the option chosen, include date/events surrounding its origin, the major landmark events, the birth and growth of web browsers (such as Mosaic, Netscape, Internet Explorer), and what it is doing today. Remember, this is not a history of computers, but rather a brief history of the Internet. You should list at least 2 online resources from which you found information relevant to your report.

4. Why is antivirus software important? Include in your answer: What are some ways you can receive virus' via the Internet? How is having up-to-date antivirus software important for keeping your computer files safe? How can not being protected lead to sharing the virus with other family and riends? What harm can a virus do to your computer or to other people's computers?

5. In what ways does filterware / Parental controls (programs like Net Nanny™ or AOL Parental Control) protect your family? With your family, develop & sign a Covenant of Family Internet Usage including the following elements:
- a. Never reveal personal information
 - b. Remember that people may not be who they say they are
 - c. Never meet an online friend in the flesh for the first time without a parent present
 - d. Never respond to flames
 - e. Stop immediately if you see or read anything that upsets you.
 - f. Time each member of the family may spend on the internet per week. Set boundaries that encourage time for family, homework, and other necessary family activities.
 - g. Types of websites that are acceptable/unacceptable to view. What are the principles that your family will use to determine what are acceptable? Base these principles on the Bible.

6. Show your ability to navigate your way around the internet by demonstrating the following:
- a. Visit at least 3 different websites (distinct domain names). Print out or show the front page of each site for your instructor.

- b. Demonstrate your ability to use a search engine to find an online Bible website. Go to the website, look up at least 3 different Bible memory texts in 3 different versions, and print or show your results to your instructor.
- c. Find 3 websites created by the Seventh-day Adventist Church. Print out or show the front page of each site for your instructor.
- d. Download a compressed file from the internet (tar, zip, etc.) to your hard drive and uncompress it and operate the program or file.

7. Demonstrate your ability to use email by demonstrating the following to your instructor. (If necessary, create an email account, with a distinct username and password):

- a. Create and send email
- b. Receive and download email
- c. Download/view an attachment
- d. Know 5 principles of operating email safely.

8. Memorize Philippians 4:8. How does this Bible text guide a Christian's use of the internet?

*Throughout this honor, the term "virus" represents the traditional virus, as well as trojans, worms, and other malicious code.

Internet, Advanced

- 1. Have the Internet Honor
- 2. Have the Basic Computer Honor
- 3. Define the following terms (or their equivalents) and tell when and how they are used:

HTTP _____

Hyperlink _____

HTML _____

Browser safe colors and hex codes _____

URL _____

Gif _____

JPEG _____

- ❑ 4. Learn and demonstrate the use of these HTML tags OR demonstrate equivalent website construction commands in one of the current website development languages (PHP, XML, etc.)
 - a. <html></html>
 - b. <head></head>
 - c. <body></body>
 - d.
 - e. <i></i>
 - f.
 - g. <p></p>
 - h.
</br>
 - i.
 - j. <hr></hr>
 - k. <table></table>
 - l. <tr></tr>
 - m. <td></td>

- ❑ 5. Make a simple table – include text, a graphic, a horizontal rule, and a link. Use hex Codes to color your text. Make your title larger than the main document text.

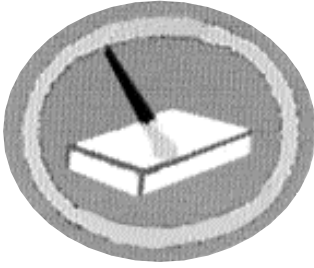
- ❑ 6. Learn about:
 - a. Web graphics and be able to explain the process used to make them download quickly.
 - b. Web safe colors and know when to use them. Use this knowledge to create a jpg and a gif that are both under 15k, but that are still easily viewable on a website, and to create at least five graphical navigation buttons and a title header for your website.

- ❑ 7. Individually or as a family, unit, or other group, develop a functioning website. All the pages of the website should be “linked” together so that someone visiting your “Homepage” may click to each of the other pages on your website. The web site should be composed of no less than 4 pages. The website should include:
 - a. A welcome page that states the reason for the website & includes at least one image or photograph.
 - b. A photos page that shows activities/events you, your family, or group have enjoyed
 - c. A guest book or contact page where people can “sign in” that they have visited OR where a contact email address is listed where people can email you when they visit your website.
 - d. A links page to other websites that you enjoy. This page should contain at least 8 links.

- e. If your page is for Pathfinders/Youth group/Church or similar organization, create a calendar page that contains upcoming events.
- f. Maintain the above website for at least 3 months. Keep the website information current by changing and editing the content often (Add pictures, update the calendar, etc.).

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Lapidary

1. Name four safety precautions to be taken when sawing rocks.
1. _____
 2. _____
 3. _____
 4. _____
2. Name two types of diamond saw lubricating and cooling solutions and their purpose.
1. _____
 2. _____
- Purpose _____
3. Explain how a diamond saw cuts rocks, how it gets dull, and how it can be sharpened.
- Cuts Rock _____
- _____
- Gets dull _____
- _____
- Sharpened _____
- _____
4. Describe the five basic steps to follow in bringing a slab or a flat surface to a polish.
1. _____
 2. _____
 3. _____
 4. _____
 5. _____

5. What important precaution should be taken between each stage of grinding and sanding?

6. What is a template, and how is it used?

7. What is a cabochon, and what is the usual thickness of the slab from which it is made?

8. How do you decide the best angle or position to slab a specimen?

9. Explain two methods of wet sanding while shaping and polishing the rock.

1. _____

2. _____

10. From what material are polishing compounds made?

If a scratch appears while polishing, how is it removed?

11. Saw, trim, properly dop, and carry a cabochon through the necessary grinding, sanding, and polishing stages to a high gloss or glassy finish.

12. Mount the cabochon on some type of backing, such as a stick pin, sweater pin, key ring, etc., with cement.



Pathfinder's Name

Letter Boxing

1. Define the following

Cache _____

Letterbox _____

Trail name _____

Personal log book _____

Stamp in _____

Hitchhiker _____

Hybrid box _____

Bonus box _____

Exchange _____

- 2. List at least five behaviors you should practice while letterboxing.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
- 3. Know the basic orienteering skills of
 - Pacing
 - Compass use
 - Know how to find the four major directions without a compass
- 4. Design, create and carve your own personal stamp.
- 5. As a unit, club or family find the clues and then locate at least ten letterboxes, four which can be part of a series. Individually “stamp in” your stamp, imprint the letterbox stamp in your log book and record your find on the web site.

Date completed _____

Instructor's Signature _____

Letter Boxing, Advanced

- 1. Complete the Letterboxing honor.
- 2. Create a letterbox stamp, post clues on a web site, establish and maintain a letterbox for six months.
- 3. As a unit, club or family find the clues and then locate an additional twenty letter boxes not found for the basic honor, eight which can be part of two or more series. Individually “stamp in”, imprint the letterbox stamp in your log book and record your find on the web site.
- 4. Design, create and carve your own hitchhiker stamp. Hide in a letterbox, post on a web site and track its travels for six months.
- 5. Participate in an exchange with letterboxers other than your local club members and obtain a minimum of 20 stamp images.



Pathfinder's Name

Lighthouses

1. Describe the following in detail concerning lighthouses:

a. What is the function of a lighthouse?

b. When were the first lighthouses of record built?

c. What is the name of the most famous ancient lighthouse?

d. What are people called who study lighthouses? Why?

e. Do all lighthouses have keepers? If not, how are they run?

2. Research the structure and function of Fresnel lenses. Explain what makes these lenses so effective.

- 3. Throughout history, what fuels were used for lighthouse lights?

- 4. Are all lighthouses located along ocean shores? If not, list other locations where you would find a lighthouse.

- 5. What is the lighthouse service called in your country? What organization or branch of government is responsible for maintaining lighthouses in your country?

- 6. When a lighthouse is a visible landmark seen from the ocean during the day it can be identified by certain markings. What are these called?

- 7. What is a foghorn? Why would one be used at a lighthouse? What are three things that affect how far away a foghorn can be heard?

- 8. Since lighthouses are often called “lights, explore the concept of “lights” in scripture by doing the following:
 - a. Look in the Bible Concordance to find “lights” and discuss lights as referred to in the Bible

- b. Explain why you think God’s word is like a lighthouse.
-
-

- c. Memorize John 8:12.

- 9. Write a poem or a story about a lighthouse light. Include thoughts of God’s “light”. Read your story or poem to your group.

- 10. Draw or photograph five lighthouse forms/types being used today.

- 11. Do one of the following:

- a. List the names and locations of 5 lighthouses in your state / province.

- b. Locate on a map the location of 10 lighthouses in your country / division

- 12. List the references you used to learn about lighthouses.

Lighthouses, Advanced

- 1. Have the Lighthouses Honor
- 2. Make a scrapbook including the following:
 - a. Pictures, post cards or drawings of twenty-five lighthouses. Label should include a brief description of: location, year built, active / non-active status, and order of the lens.
 - b. Write up a short history of the above lighthouses.
 - c. Include drawings/pictures and answers to all the requirements for this honor in your scrapbook.
- 3. List the development of a Fresnel lens, including: Name of the gentleman that invented it, country that he came from, year developed.

- 4. Draw a Fresnel lens: Show how prisms are used to concentrate light, draw a bull's eye lens and state its purpose.

- 5. Make a chart showing each class of Fresnel lens:
 - a. Define order and list by size
 - b. Name at least one lighthouse using each order
- 6. Research and describe the history of the mechanism for rotating lights.

- 7. Make a chart of six lighthouses showing nighttime (light) and daytime (day mark) signature.
- 8. What is a lightship? Why and where are lightships needed?

- 9. Read about lighthouse keepers and list some of the hazards they faced in completing their duties.

- 10. Study quotes by Ellen White mentioning lighthouses and discuss the meaning. Place a copy of the quotes in your scrapbook.
- 11. Obtain a “Lighthouse Passport” and have it stamped at 10 different lighthouse locations.
- 12. Build a lighthouse modeled after a real lighthouse using a lighthouse kit, wood, or other medium. Know the name, location, and date when the actual lighthouse was originally built.

Make a chart of six lighthouses showing nighttime (light) and daytime (day mark) signature

	Night Time	Daytime
Lighthouse 1		
Lighthouse 2		
Lighthouse 3		
Lighthouse 4		
Lighthouse 5		
Lighthouse 6		



Pathfinder's Name

Mountain Biking

- 1. Earn the Cycling Honor.
- 2. Using a mountain bike and a road bike as examples, show and describe five differences between mountain and road bicycles.
- 3. Demonstrate the function and advantages of cleats, bar ends and a front shock on a mountain bike.
- 4. List at least three materials that mountain bike frames are made from and explain why new materials are always being tested for mountain bike frames.

1. _____

2. _____

3. _____

- 5. Explain differences between single track, double track, and fire roads.

Single track _____

Double track _____

Fire roads _____

- 6. Give the definition for the terms "hard tail" and "full suspension" and explain the advantages and disadvantages of a full-suspension bike compared to a hard tail.

Hard tail _____

Full suspension _____

Advantages _____

Disadvantages _____

- 7. Describe the basic rules of courtesy that should be followed when doing off road riding.

- 8. List 3 basic pieces of safety equipment that should be worn when mountain biking.

1. _____

2. _____

3. _____

- 9. Know the 3 most commonly broken bones in mountain biking accidents and how to prevent these injuries from occurring.

1. _____

2. _____

3. _____

- 10. Demonstrate how to properly clean, polish and lube your bike after you ride it.

❑ **11.** Complete the following riding requirements: All rides must be done on some sort of off-road trail like single track and a given trail may be used for more than one ride or repeated to make a ride long enough to meet the requirements (if needed).

a. Three 5 mile rides.

Date completed _____

b. Two 10 mile rides.

Date completed _____

c. One 20 mile ride.

Date completed _____



Pathfinder's Name

Paper Quilling

1. What was paper quilling called when the craft first began?

2. Know the history of quilling.

3. Know the tools used in quilling.

4. Know and be able to correctly make each of the following rolls:

- a. Tight Circle
- b. Loose Circle
- c. Teardrop
- d. Shaped Teardrop
- e. Marquise
- f. Shaped Marquise
- g. Crescent n Holly Leaf
- h. Square
- i. Rectangle
- j. Triangle
- k. Bunny Ear
- l. Half Circle
- m. Rolled Heart (Arrow)

- 5. Know and be able to correctly make each of the following scrolls:
 - a. Loose Scroll
 - b. Open Heart
 - c. V Scroll
 - d. S Scroll
 - e. C Scroll
- 6. Make a simple floral design by using at least three of the methods above.
- 7. Make a filled-in picture or ornament.

Date completed _____

Instructor's Signature _____

Paper Quilling, Advanced

- 1. Know and be able to correctly make each of the following Eccentric shapes.
 - a. Eccentric Loose Circle
 - b. Eccentric Teardrop
 - c. Eccentric Marquise
 - d. Eccentric Fan
 - e. Eccentric Crescent
 - f. Eccentric Bunny Ear
 - g. Eccentric Tulip

- 2. Know and complete three of the following shaping techniques.
 - a. Fringed Flower
 - b. Grape Roll
 - c. Spiral
 - d. Loop Method
 - e. Pegs
 - f. Weaving Paper
 - g. Twisted Loop
 - h. Huskings
 - i. Folded Roses
 - j. Curled Flowers

- 3. Make a picture or ornament using at least three of the Eccentric Shapes.

- 4. Make a three-dimensional object.



Pathfinder's Name

Parade Floats

- 1. Learn and implement the following safety rules in the creation of a parade float.
- 2. List at least five materials that can be used in your float building and decorating.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
- 3. Help build a float by:
 - a. Helping design a float for your Pathfinder Club/Church youth group
 - b. Assist in planning materials needed and be involved in collecting those items
 - c. Decorating a float for at least 4 hours
- 4. Be in a parade experience with the float you have helped to build and decorate, and as appropriate, hand out pamphlets that explain the youth/Pathfinder ministry of your group.
- 5. Photograph your float during its creation and during the parade and share the experience in one of the following ways.
 - a. With at least two shut-ins how your group witnessed in the community
 - b. Report with pictures and stories for a church or Sabbath School program and for a Pathfinder club worship program
- 6. Memorize Mark 16:15 and discuss with a group how the honor's parade float project helps fulfill this biblical command.

Date completed _____

Instructor's Signature _____

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Update 2009**

Parade Floats, Advanced

- 1. Complete the Parade Floats honor.
- 2. Review with your team the basic safety requirements concerning usage of ladders, hand tools, knives, and other power equipment used to complete this honor.

ladders _____

hand tools _____

knives _____

other equipment _____

Demonstrate safety in all aspects of creating your float.*.

- 3. Build a float (with your Pathfinder/youth group) not previously used for completing honor requirements with the following minimum specifications:
 - a. 6' x 10' minimum base size
 - b. Mechanically moving float display parts (not including axles, wheels, etc. used to transport the float)
- 4. Be centrally involved in the design of the float. As part of this involvement.
 - a. Plan materials needed and delegate collection of those items
 - b. Decorate a float for at least 6 hours
 - b. Be involved in directing the development and creation of at least one portion of the float
- 5. Enter a float, not previously used, in two parades. One of the parades may be a Pathfinder Fair or its equivalent.

Note: Risk Management (adventistrisk.com) has guidelines listed on their website concerning safety management



Pathfinder's Name

Peace Maker

1. Define conflict and discuss the difference between good and bad conflict.

2. Identify the 4 causes of conflict as described in the Bible. Read the following passages for assistance:

Acts 15:22-20

1 Corinthians 12:12-31

Genesis 13:1-12

James 4:1-3

- ❑ 3. Identify each segment of the slippery slope of addressing conflict, and discuss examples of each type from the Bible and your own experiences.
 - a. Escape – Denial
 - Blame Game
 - Run Away
 - b. Attack
 - Fight
 - Gossip
 - Put Downs
 - c. Conciliation
 - Over look
 - Talk it out
 - Negotiate

- ❑ 4. Reverse role-play a conflict from your own life and identify where you are on the “slippery slope” and what possible conciliation options you might try.

Date completed _____

Instructor’s Signature _____

Peace Maker, Advanced

Instructor Required

- 1. Complete the Peace Maker honor
- 2. Define mediation and arbitration and discuss the similarities and differences between them.
- 3. Identify and demonstrate the role and responsibilities of an effective mediator and arbitrator.
- 4. Discuss the difference between litigation (an adversarial relationship) and Christian conciliation.
- 5. Identify what types of conflicts should be:

Mediated

Arbitrated

Litigated

Negotiated

- 6. Participate in mediating a conflict (i.e. role play) between two people or groups and discuss the process, identifying what worked. What didn't work, and why.
- 7. Participate in arbitrating a conflict (i.e. role play) between two people or groups and discuss the process, identifying what worked. What didn't work, and why.



Pathfinder's Name

Pinewood Derby

- 1. Name the four basic components of a Pinewood Derby car.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____

- 2. Cars must meet the basic following requirements:
 - a. Must be made during the current calendar year or Pathfinder club year.
 - b. Width of car shall not exceed 2-3/4" or 70 mm
 - c. Length of car shall not exceed 7" or 178 mm
 - d. Weight of car shall not exceed 5 oz. (142 grams)
 - e. Width between wheels shall be 1-3/4" or 44 mm
 - f. Height from bottom of car to bottom of tires shall be 3/8" min. or 10 mm
 - g. Use only axles, wheels, and wood provided in the kit you purchase.
 - h. Wheel bearings, washers, and bushings are prohibited.

- 3. Know how to use safely the following while building your project:
 - a. Saw
 - b. Wood rasp
 - c. Course sandpaper
 - d. Fine sandpaper
 - e. Wood plane
 - f. Hammer
 - g. Shaping stick

- 4. Know the basic steps in designing a car:
 - a. Design
 - b. Transfer of design
 - c. Building the car
 - d. Axles and wheels
 - e. Adding weight
 - f. Lubrication

5. Design and build to completion a Pinewood Derby car from a basic kit using the instructions in the kit or if no instructions, follow the directions in # 2.

6. Participate in a sponsored Pinewood Derby event using the car you built in number five (5).

Event _____

Date of event _____

7. Define and practice good sportsmanship as it relates to your Christian walk.

Note: If you are planning to participate in a conference Pinewood Derby event be sure you use the correct specifications from your conference because some use different specifications than listed above.

Where to Order:

S & W Crafts Manufacturing or	Pine Car
PO box 5501	PO Box 98
Pasadena, CA 91117	Linn Creek, MO 65052

Note: Pinewood Derby cars are usually available through the Boy Scout organization.

Date completed _____

Instructor's Signature _____

Pinewood Derby, Advanced

- 1. Have the Pinewood Derby Honor.
- 2. Know the Pinewood Derby race regulations for your district, area, or conference. NOTE: Many conferences have special Pinewood Derby events and the rules may vary as to length, weight and wheels.

- 3. Be aware of the following:
 - a. Cars shall not ride on any kind or type of springs.
 - b. No loose materials of any kind are allowed in or on the car.
 - c. Official number must be clearly marked and visible.

- 4. Review tool safety.

- 5. Know the various ways to prepare and finish your project:
 - a. Sanding wood
 - b. Filling holes
 - c. Sealing new wood
 - d. Coloring wood
 - e. Gloss finishes
 - f. Enamel finishes
 - g. Stain finishes
 - h. Wax finishes
 - i. Acrylic finishes
 - j. Water colors
 - k. Leather look on wood
 - l. Decoupage
 - m. Forged foil

- 6. Know the principle meaning of friction and how it can effect the performance of your car.

- 7. Know the three best ways to reduce friction on your car.
 - a. Axle lubrication
 - b. Aerodynamic design
 - c. Smooth finish
 - d. Proper wheel/axle clearance
 - e. Reduce wheel shaking

- 8. Know the three theories of weight distribution and how it could affect the performance of your car.
 - 1. _____
 - 2. _____
 - 3. _____

- 9. Design and build to completion the following (not previously built):
 - a. Basic car kit with complete exterior finish
 - b. Deluxe/fancy car kit with complete exterior finish and decals
 - c. Be creative by building one of the following: tank, submarine, airplanes, piano, ice cream sandwich, fire engine, vege-link, school bus, baby carriage, etc.

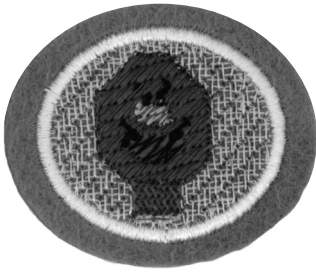
- 10. Use details on your project such as steering wheel, driver, decals, and etc. as long as these details do not exceed the maximum length, width, and weight specification.

- 11. Participate in a club, district, or conference sponsored Pinewood Derby event with a current car.

Event _____

Date of event _____

- 12. Define and practice good sportsmanship as it relates to your Christian walk.



Pathfinder's Name

Plastic Canvas

1. What is plastic canvas?

2. Name four (4) types of plastic canvas and give a brief description of each.

1. _____

2. _____

3. _____

4. _____

3. Which type of yarn is best for use on plastic canvas?

4. Describe the following types of yarn and say on which type of canvas they work best.

Worsted Weight Yarn

Sport Weight Yarn

Tapestry Yarn

Persian Wool

Pearl Cotton

Embroidery Floss

5. What type of needle is used on plastic canvas? Which size needle is used on each type of plastic canvas?

6. Which instruments are used for cutting plastic canvas? How do you cut plastic canvas?

7. Name at least ten (10) stitches and make a one-inch sample of each.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

- ❑ 8. Make two of the following items using three different stitches.
 - a. Coaster
 - b. Bookmark
 - c. Picture Frame
 - d. Refrigerator Magnet
 - e. Christmas Ornament
 - f. Door Hanger

- ❑ 9. Make one of the following using four different stitches.
 - a. Tissue Box Cover
 - b. Tote Bag
 - c. Floppy Disk Holder
 - d. Trinket/Coaster Box

Date completed _____

Instructor's Signature _____

Plastic Canvas, Advanced

- 1. Earn the Plastic Canvas honor.
- 2. Name six (6) stitches (not previously used in Plastic Canvas, Basic) and make a two-inch sample of each.
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
 - 6. _____
- 3. Use four (4) of these stitches to design your own round Plastic Canvas basket. The basket should have a handle and a cover. Be as creative as possible.
- 4. Make a six-piece coaster set with a matching coaster box for your kitchen.
- 5. Make an item of your choice. Use your imagination, be creative and moreover, have fun!



Pathfinder's Name

Power Boating

- 1. Have the Advanced Beginner's Level of the Swimming Honor.
- 2. Know the laws regulating pleasure boating in your state or province.

- 3. Know what hazards of weather can affect boating safety and performance.

- 4. Know the nautical rules of the road and waterway aids to navigation.

Rules _____

Aids _____

- ❑ 5. Know what safety equipment, signaling devices, and lights are required on Class A and Class 1 boats.

	Class A	Class 1
Safety Equipment	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
Signaling Devices	_____	_____
	_____	_____
	_____	_____
	_____	_____
Lights	_____	_____
	_____	_____

- ❑ 6. Know and practice boating safety rules.

- ❑ 7. What should the passengers do if the boat capsizes?

8. What is the General Prudential Rule?

9. Know the meaning of the following boating terms:

Abaft _____

Abeam _____

Aboard _____

Aft or After _____

Amidships _____

Astern _____

Beam _____

Below _____

Bend _____

Bilge _____

Bow _____

Bulkhead _____

Cleats _____

Draft _____

Freeboard _____

Keel _____

Leeward _____

Port _____

Starboard _____

Stern _____

Trim _____

Windward _____

- 10.** Show how to properly operate a power boat by doing the following:
 - a.** Assist in putting a boat in the water from a boat trailer.
 - b.** Check for all safety equipment. Check fuel and motor.
 - c.** Start motor and get underway from a beach or dock.
 - d.** Drive boat in a straight line for one fourth of a mile. Make a 90-degree turn to the left and right. Make a 180-degree turn.
 - e.** From a stop, drop and retrieve the anchor.
 - f.** Dock or beach with proper tie up.
 - g.** Assist in loading a boat from the water onto a boat trailer.

- 11.** Know how to prepare and store a boat and motor for the off season.



Pathfinder's Name

Preach It

(instructor required)*

Note: Unlike many AY Honors, this honor does not have “knowledge” requirements categorized separately from action requirements. Rather, the requirements for honor completion are listed categorically.

1. Spiritual Preparation

What is intentional spiritual preparation?

Discuss with your instructor the role of spiritual preparation in Evangelism.

2. Seed Sowing

What is seed sowing?

Name 5 examples of “seed sowing”

1. _____
2. _____
3. _____
4. _____
5. _____

Participate in at least one “seed sowing” event

3. Invitation — Demonstrate and/or explain three ways to invite someone to an evangelistic meeting.

1. _____
2. _____
3. _____

- ❑ 4. Understand a Budget
 1. Develop a budget with the Pastor or your evangelistic team leader
 2. Know how much money you have to work with and how to adjust your planning based on your budget
 3. Unless it is already available at your venue, find out the costs of:
 - Equipment
 - Printed materials
 - Mailing and postage costs
 - Advertising
 - TV
 - Radio announcements
 - Building rent

- ❑ 5. Know the law/code regarding holding public meetings in your area.

- ❑ 6. Equipment Knowledge

List, describe the use of, and specialized care for the equipment needed in a media based evangelistic series, such as the following:

Projector: Know proper care of equipment, How to protect from dust (especially in 3rd world countries), Demonstrate ability to properly connect to computer and operate.

Computer:
 Know proper care (protection from dust etc.)
 Demonstrate ability to hook up and use with projector.
 Understand the program for using a “split screen”
 Be familiar with the various plug adapters for use in other countries

Power Inverter

- ❑ 7. Sermon Preparation — Using Media type split screen computer evangelist sermons:
 1. Demonstrate ability to edit
 2. Use the “1st time translation sheet” and learn spacing
 3. Work with a translator*
 4. Practice the sermon 3-5 times out loud with a translator*
 5. Work with your instructor for advice and input to improve your presentation.

- ❑ 8. Getting Decisions — Alater Calls
What is an altar call?

What are some key ingredients of an altar call?

- ❑ 9. Present a five minute sermon you have edited

- ❑ 10. Evangelist Meeting Follow-up

What does the term Disciple mean?

What was Christ method of discipling?

Name five things a church can do to disciple a new believer.

1. _____
2. _____
3. _____
4. _____
5. _____

Preach It, Advanced

- 1. Complete the basic Preach It honor
- 2. Participate in a Media type evangelistic series:
 - a. in any country
 - b. preach at least 6 of the sermons in that series
- 3. Read *Evangelism* pp 628-683 The Worker and His Qualifications



Pathfinder's Name

Refugee Resettlement

- 1. Be at least in the 8th grade.
- 2. Explain why refugees from other countries arrive in your nation. What are the causes and what governmental authorities must certify each case before the individual or family is allowed to travel?

- 3. List the immediate needs that a refugee has when they arrive in your country. Describe the feelings that the refugee may have about a new language, culture and environment.

- 4. Find out about the organizations in your community that assist refugees and immigrants. Use the telephone or visit the office of at least one such organization and ask how they would assist if your local church were to cosponsor a newly-arrived refugee with ADRA or Adventist Community Services.
- 5. Write a plan of at least 500 words describing the arrangements that your local church could make if it were the cosponsor with ADRA or Adventist Community Services for a refugee arriving in your community.
- 6. Interview a person who immigrated to your country. Ask them about the contrast between the culture in your community and the community where they were raised. Ask them to describe the process they went through to become comfortable in your community. Take notes during the interview.
- 7. Give a report of at least 10 minutes duration to a Sabbath School program, Pathfinder Club church committee or civic club on what you have discovered in completing the requirements for this honor. Tell why the refugee situation is so important and make specific recommendations to the group of ways in which they can help meet the needs of refugees.

Date completed _____

Instructor's Signature _____

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Pathfinder's Name

Rural Development

1. Explain to your instructor why some nations in our world are called "developing" countries and why others are called "developed" countries.

2. Name ten developing countries and list two things that ADRA is doing in these countries that would fall under the description of "relief" and three things that would fall under the description of "development."

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Date completed _____

Instructor's Signature _____

North American Division
2002 Edition
Update 2009

8. _____

9. _____

10. _____

- 3. Read what Ellen White has written about why we have the poor with us in *Desire of Ages*, Chapter 70, entitled "The Least of These My Brethren." Summarize what you have learned from this chapter in 50 words or less.

- 4. View an ADRA video reporting on development activities in other countries than your own, and participate in a discussion about what you see for at least 20 minutes following the video.

- 5. Participate in one of the following field trips or group projects:
 - a. Work as a volunteer in ADRA's Global Village program when it is operating.
 - b. Go on a mission trip to a disadvantaged rural area in another country or within your own nation.
 - c. A project in your community to collect a truck-load of clothing, hand tools, medical supplies, tents or other items that ADRA can use in rural development projects overseas. This includes raising sufficient donations to transport the collected items to the nearest ADRA warehouse.
 - d. A 24-hour group fast and educational "lock-in" session with your youth group focused on understanding the needs of the poor in developing nations, and designed to raise funds for rural development.

- ❑ 6. Write a letter to a person of your same age and gender in a rural, under developed area in another country. Ask questions to learn about how they live their life and express your concern for supporting development in their country without using condescending language.

Date completed _____

Instructor's Signature _____



_____ Pathfinder's Name

Sanctuary Honor

1. Name the three main parts of the sanctuary and the court yard.

1. _____

2. _____

3. _____

Tell what was in each part.

1. _____

2. _____

3. _____

Tell what each piece of furniture represents.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

- 2. Draw a scale model of the sanctuary, the court yard and the position of all the furnishings. (Remember to add N, S, E, W)

- ❑ 3. How many coverings were over the sanctuary?

List the type of coverings in the order from inside to outside.

Tell what each covering represented.

1. _____

2. _____

- ❑ 4. The following colors were used in the sanctuary and in the priests clothing. Tell what each color represented.

Red _____

Blue _____

Purple _____

White _____

Black _____

Gold _____

Silver _____

Brass _____

- ❑ 5. Discuss and memorize 1 John 1:9, Daniel 8:14, and Exodus 25:8.

- 6. The priests were from which of the 12 tribes?

Why? _____

- 7. Describe the robe of the common priest.

The high priest.

- 8. Read and discuss The Great Controversy page 488 and Hebrews 4:14-16.

- 9. What kinds of animals were brought daily to the courtyard?

- 10. Write a paragraph or tell how you see Christ represented in the sanctuary and its services.



Pathfinder's Name

Scrapbooking

1. What is the purpose of Scrapbooking?

2. Why journal?

3. What is cropping and why is it done?

4. What are the four (4) main types of scrapbooks used?

1. _____

2. _____

3. _____

4. _____

5. What is the purpose of using acid-free products?

- 6. What are the four (4) different types of acid-free adhesive?
 1. _____
 2. _____
 3. _____
 4. _____
- 7. What 'tool' is used to sharpen scissors and punches when they get dull?

- 8. Name five (5) different types of acid-free paper used in Scrapbooking.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____
- 9. Make a scrapbook of at least 12 pages (8 1/2 x 11 or larger) on one of the following themes, and incorporating the use of colored paper, stickers, decorative scissors, matting and journaling.
 - School Year
 - Sporting Events
 - Vacations
 - Holidays
 - Building Projects (mission trips, new home, ECT.)
 - Wedding
 - Birthday Party
 - All About Me (birth to now)
 - Family Reunions
- 10. Memorize Joel 1:3

Scrapbooking, Advanced

- 1. Have the Scrapbooking Honor.
- 2. What is lignin? _____

- 3. What plastic is safe to use in Scrapbooks?

- 4. What plastic is not and why not?

- 5. Describe the value of Scrapbooking to future generations.

- 6. How do you fix a journaling error?

- ❑ 7. Complete an album of at least 24 pages of a size not less than 8 1/2 x 11 using techniques that includes the use of at least 10 of the following:

Matting

Double Matting

Border Designs

Journaling Boxes

Colored Paper

Printed Paper

2 Page Layouts

Die Cuts

Self Designed Die Cuts

Stickers

Punches

Memorabilia Pockets

Decorative Scissors

Templates

Photos Cropped into a circles or ovals

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Skiing, Cross-country

- 1. List and describe the principle characteristics, qualities, and sizing of the following cross-country skiing equipment: (Complete Chart #1)
 - a. Skis (both waxable and unwaxable)
 - b. Bindings
 - c. Shoes
 - d. Poles
- 2. Describe and demonstrate how the above gear would be prepared for use and cared for both on the field and during the off season. (Complete Chart #2)
- 3. What consideration should be made when selecting clothing to be worn while cross-country skiing?

What features would you look for when selecting a pack for cross-country ski touring?

- 4. Demonstrate properly on skis the following travel techniques:
 - a. Flat striding with good kick, purchase, and form
 - b. Single poling, change-up, and double poling
 - c. Side stepping up and down slopes
 - d. Herringbone slope climbing
 - e. Traverse-side stepping up slope with kick turns
 - f. Straight up slope climbing
 - g. Straight downhill running under control, 20 degree slope (schuss)
 - h. Moving step turning down slope
 - i. Snow plowing for slowing speed and stopping
 - j. Sitback stopping
- 5. Explain the purpose of waxing.

Briefly explain the need for different waxes for different snow types and temperatures.

6. Explain basic safety precautions to follow in cross-country skiing.

7. Know and explain the official National Ski rules for conduct in cross-country skiing.

8. Demonstrate skiing ability by doing the following:
- a. Take three separate three-mile trail tours with another individual. If possible, have varying snow conditions.

	Dates	Other individual
1.	_____	_____
2.	_____	_____
3.	_____	_____

- b. Take a ten-mile tour over varying terrain.

Date of tour _____

- c. During all tours carry necessary gear (safely) and wear proper clothing for conditions demonstrating ability to maintain proper body temperature, dryness, and condition.

Date completed _____

Instructor's Signature _____

Skiing, Cross-Country Chart #1

Item	Characteristics	Qualities	Sizing
Skis Waxable			
Skis Unwaxable			
Bindings			
Shoes			
Poles			

Skiing, Cross-Country, Chart #2

Item	Preparations for use and care on the field	Preparations for use and care during the off season	Demonstrated
Skis Waxable			
Skis Unwaxable			
Bindings			
Shoes			
Poles			



Pathfinder's Name

Slow-Pitch Softball

- 1. Know the basic rules of slow-pitch softball.
- 2. What is the meaning of "Good Sportsmanship?"

- 3. Name and demonstrate your understanding of the skills required for the ten (10) softball playing positions.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

- 4. Identify the following:

Bat _____

Batter's box _____

Coaches' box _____

Diamond Bags _____

Glove _____

Home base _____

Infield _____

Left field _____

On deck circle _____

Outfield _____

Pitcher's mound _____

Pitching rubber _____

Right field _____

Softball _____

❑ 5. Define or explain the following game terms:

Bases Loaded _____

Bunt _____

Fielder's choice _____

Fly Ball _____

Force Play _____

Foul tip _____

Grand Slam _____

Grounder _____

Home run _____

Home team _____

Innings _____

Lineup _____

Popup _____

Run _____

Score _____

Strike zone _____

The count _____

Walk _____

- ❑ 6. Explain the following official's calls or rules:

Double Play _____

Error _____

Fair ball _____

Foul ball _____

Ground rule double _____

Infield fly rule _____

Out _____

Safe _____

- ❑ 7. Demonstrate the ability to read a basic scorecard that was scored in a game you participated in.

- 8. List and describe five (5) responsibilities of an umpire.
 1. _____
 2. _____
 3. _____
 4. _____
 5. _____

- 9. Name 5 mental and physical attributes to be gained from slow-pitch softball.

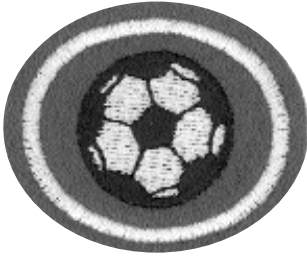
Mental

1. _____
2. _____
3. _____
4. _____
5. _____

Physical

1. _____
2. _____
3. _____
4. _____
5. _____

- 10. As a team or individual, develop a plan to practice outreach while completing the requirements for this honor. Possible options could include the following:
 - a. Invite 3 friends not from your church to play a game.
 - b. Have prayer before each game.
 - c. Exhibit good sportsmanship and fair play.
- 11. Play three (3) slow-pitch official games with an umpire and demonstrate reasonable skills.
- 12. Write a one page report on a famous athlete. Discuss why they are or are not a good Christian role model.
- 13. Discuss with your Pathfinder leader, pastor or teacher the problems facing a Seventh-day Adventist youth considering participating in sports in Jr. High, High School or college. What alternatives are there to allow for continued activity in sports?



Pathfinder's Name

Soccer

- 1. Know the basic rules of soccer.
- 2. What is the meaning of "Good Sportsmanship?"

- 3. Make a drawing of the soccer playing field.
- 4. Demonstrate reasonable skill in playing the game of soccer.
- 5. Describe the different skills required at each position.

Goaly _____

Forward _____

Mid-fielder _____

Defensemen _____

- 6. Know the meaning of and the Referee signals for the following:

	Meaning	Referee Signal
Off sides	_____	_____
	_____	_____
	_____	_____
Holding	_____	_____
	_____	_____
	_____	_____

Corner kick _____

Indirect kick _____

Direct kick _____

Goal _____

7. Define the following terms:

Advantage _____

Booking _____

Clearing _____

Corner Arcs _____

Cross _____

Dribble _____

Drop ball _____

Drop kick _____

Dummy _____

Half volley _____

Touch _____

Volley _____

Heading _____

Juggling _____

Marking _____

Nutmeg _____

Out-of-bounds _____

Passback _____

Penalty area _____

Slide tackle _____

Tackle _____

Throw _____

Trapping _____

Wall _____

- 8. Spend at least 4 hours helping less skilled or younger players improve their skills.

Date completed _____

- 9. Play a least 5 games with family or friends. Show good sportsmanship during your practice and games.

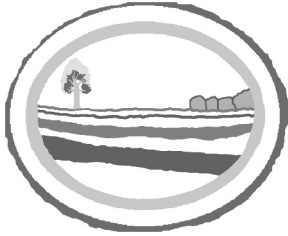
Date of games _____

- 10. Write a one page report on a famous soccer player. Discuss why they are or are not a good Christian role model.

- 11. Discuss with your Pathfinder leader, pastor or teacher the problems facing a Seventh-day Adventist youth considering sports in Jr. High, High School or college. What alternatives are there that allows for continued activity in sports.

Discussion date _____

Person _____



Pathfinder's Name

Soils

1. Define what "soil" means?

2. Where on earth is all soil located?

3. What are 5 key factors in soil formation?

1. _____
2. _____
3. _____
4. _____
5. _____

4. Define the following terms:

A-Horizon _____

B-Horizon _____

C-Horizon _____

Organic layer _____

Mineral layer _____

Clay _____

Leaching _____

Silica _____

Humus _____

Soil Profile _____

Parent Material _____

Pedologist _____

- ❑ 5. Define the term "Soil Classification". Why are soils classified?

- ❑ 6. Discuss three differences between the following soil types:

Desert

1. _____
2. _____
3. _____

Temperate

1. _____
2. _____
3. _____

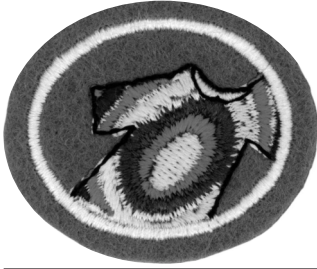
Tropical

1. _____
2. _____
3. _____

- 7. Examine a 2-foot vertical section of soil. Label the different types of organic matter found, identify the different soil horizons, and mark the transition from the soil layer to the mineral layer.
- 8. Draw, photograph, or collect and correctly label 5 different soil types.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Tie-Dye

- 1. Know what the best types of materials are for dyeing and how to prepare them for dyeing.

- 2. Know what the purpose of the Soda Ash is and how long the fabric is to soak.

- 3. Know the purpose of the Urea that is mixed with the Dye.

- 4. What safety equipment should be worn when mixing up the dye for Tie-Dyeing? Why?.

- 5. Determine what the three primary colors are.
 - 1. _____
 - 2. _____
 - 3. _____
- 6. Verbally describe what primary colors of dye will be needed to make the following secondary colors. *Orange, Green, & Purple.*
- 7. Verbally describe what the outcome will be if two secondary colors are mixed.

- 8. Use a Kleenex tissue & colored marker to demonstrate two different types of folds one could do on a T-shirt.
- 9. Once you have seen the outcome of the different folds you have created on tissue, fold & dye an item for yourself. *Bandana, t-shirt, pillowcase, etc...* Always keep in mind, no two items will be identical, nor will they be perfect. Each item will be as unique as the individual who made it.
- 10. Wear or bring this item to the next meeting for your club members to see.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Travel

1. List as many modes of transportation you can think of that people use to get around the planet.

Narrow down the previous list to a "Top Five" most common modes of transportation. List the pros and cons of each of the "Top Five."

1. _____
2. _____
3. _____
4. _____
5. _____

2. List some of the pros and cons of the following types of lodging:

Hotel/motel

Pros

Cons

Youth hostel

Pros

Cons

Friends/family

Pros

Cons

RV/trailer/camping

Pros

Cons

Resorts

Pros

Cons



Pathfinder's Name

Tutoring

- 1. Be at least in the 8th grade.
- 2. Describe the social conditions that make it more difficult for underprivileged children to achieve basic reading and math skills during elementary school.

- 3. Explain the major types of community-based tutoring programs:

In-school, cross-age tutoring

After-school or weekend program

Community homework center

- 4. Explain the difference between one-on-one tutoring and small-group classes, and list the pros and cons of each approach.

- 5. List the basic functions included in the job description of the volunteer tutor in a community-based tutoring program.

- 6. Describe the resources or tools that a volunteer tutor uses in a community-based tutoring program.

- 7. Complete at least ten tutoring sessions with a younger child.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Unicycle

1. Know the name and purpose of the various parts of a unicycle.

2. Define these basic unicycle terms:

free mount _____

idle _____

UPD _____

3. Know what safety gear one should use while unicycling and why one should use it.

- 4. Name 5 different types of unicycles and explain what makes them unique.

1. _____

2. _____

3. _____

4. _____

5. _____

- 5. How is unicycling thought to have been invented?

- 6. Repair a punctured unicycle tire.

- 7. Be able to free mount, ride 50 meters/150 feet, turn right and left, and gracefully dismount, all without falling off.



Pathfinder's Name

Urban Development

- 1. Explain the process of urbanization and list some of the human needs that it creates, especially for the poor.

- 2. Read the chapters in *Ministry of Healing* by Ellen White entitled "Help for the Unemployed and Homeless" and "The Helpless Poor," and write a one-page summary of the key points.
- 3. Interview the pastor or Adventist Community Services leader or Inner City Program coordinator in an inner-city Seventh-day Adventist Church and ask how the church is meeting the needs of the poor in the community. Take notes during the interview.
- 4. Present a 15-minute report on how a youth group might help in the urban development problems the church is sponsoring. The report may be presented one-on-one to your instructor or youth-group adult sponsor, or it may be presented in a group setting.
- 5. Spend at least four hours in one of the following field trips as a participant observer:
 - Go out with a street ministry team that provides food and/or blankets or coats to the homeless in an urban neighborhood,
 - Go out with a health screening van that operates in an urban neighborhood.
 - Go out with a Christian work team that is repairing or building urban housing for the poor.
 - Work in a soup kitchen or homeless shelter in an urban neighborhood.
 - Volunteer in an Adventist Community Services center located in an urban neighborhood.

- ❑ 6. Attend a worship service in a church in an urban neighborhood made up of a different ethnic group than your own. List for your instructor the things you observed that were different than what you have grown up to be used to in your own culture. Then list the things that were similar to what you are used to.
- ❑ 7. Write a proposal of at least four pages for an urban development project that could be conducted largely by teen and/or young adult volunteers. Include objectives, action plan, personnel needed, schedule and budget. This proposal may be written by an individual or as a team project in a work team of no more than four persons.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Wakeboarding

- Have the Advanced Beginner's Swimming Honor.
- 1. Know and practice the following safety rules:
 - a. Never wakeboard at night.
 - b. Never wakeboard during an electrical storm.
 - c. Always wear a ski vest while wakeboarding.
 - d. Make sure the wakeboarding rope is in good condition.
 - e. Make sure the wakeboarding bindings are in good condition.
 - f. Always have a spotter and flag in the boat.
 - g. Stay clear of objects, such as other skiers, swimmers, tubers, docks or floating objects.
 - h. If you fall let go of the rope.
 - i. After a fall, raise a hand to indicate you are all right.
 - j. Do not stand in the boat while it is moving.
- 2. Know the following hand signals:
 - a. Slower
 - b. Speed is OK
 - c. Faster
 - d. Back to dock
 - e. Stop
 - f. Turn
- 3. Put on the wakeboard by yourself. Be able to remove the wakeboard in deep water by yourself.
- 4. Execute a deep-water start on the wakeboard on a full line rope.
- 5. Successfully cross both wakes and return to center without falling.
- 6. Do a small jump off the wake and land without falling.

*NOTE: All wakeboarders in AY sponsored wakeboarding class must wear a ski vest.

Date completed _____

Instructor's Signature _____

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Update 2006



Pathfinder's Name

Whistle

1. Relate briefly the history of whistle making and tell why whistles were invented.

2. Explain the importance of conservation in regard to whistle making.

3. What do the seasons of the year have to do with making a willow whistle?

4. Name two (2) trees that make the best whistles and why. List three (3) other trees that can be used to make whistles.

1. _____

2. _____

3. _____

4. _____

5. _____

5. Give a brief description of the following styles of whistles:

Tube Whistles _____

Pan Whistles _____

Flute Whistles _____

6. Name five (5) types of modern whistles and their uses.

1. _____

2. _____

3. _____

4. _____

5. _____

7. What modern musical instrument is a sophisticated whistle?

8. How does a whistle work?

9. What is the most common equipment used in making whistles?

10. Explain the importance of wood grain in whittling a whistle.

11. Why must the size of the holes and chamber be proportional to the amount of airflow?

12. How do you tune a whistle?

- 13.** Demonstrate that you can make a two-handed whistle using your hand and a piece of grass.
- 14.** Demonstrate the technique and try to accomplish a whistle using your hands (s) or fingers.
- 15.** Review and demonstrate the proper first aid and safety rules for the usage of a pocketknife.
- 16.** Know how to sharpen a pocketknife using a whetstone or oil sharpening stone.
- 17.** Make the following whistles:
 - Pan (Tubes) whistle
 - Flute Whistle
- 18.** Learn to play a simple song on each whistle you have made.

Date completed _____

Instructor's Signature _____

Whistle, Advanced

- 1. Have the Whistle Honor
- 2. What is a sliding bark whistle and who first made this type of whistle?

- 3. What happens when a branch for making a sliding bark whistle is too large or too small?

- 4. What is a recorder whistle?

- 5. Make the following whistles:
willow (sliding bark) whistle
recorder whistle

- 6. Demonstrate your ability to correctly use each of the whistles you have made.



Pathfinder's Name

Worms

1. What is a worm?

2. Where do worms live?

3. What do worms eat?

4. What kingdom are worms found in?

5. Name the 3 major phyla (the next largest category of classification) that contain worms, and describe them.

1. _____

2. _____

3. _____

- ❑ 6. What do “free living” and “parasitic” mean?

- ❑ 7. Which phyla, mentioned in question 5, are free living or parasitic?

- ❑ 8. Answer the following questions about earthworms.

Where do they live?

What do they eat?

How are they helpful to humans?

How short and how long do they get?

How many are there in one square meter of soil?

How many species are there?

What is the clitelum?

- 9.** Find an earthworm outside and do the following:
 - a.** Be able to distinguish the following parts: Head end, Tail end, and clitelum.
 - b.** Observe, and describe how it moves.

c. How long does it take your worm to move one foot?

d. Race your earthworms!

- 10.** Answer the following questions about leeches.

Where do they live?

What do they eat?

How are they harmful to humans?

How are they helpful to humans?

- 11.** Find a verse in the bible where worms are mentioned and demonstrate the story (through music, poem or drama)

Worms, Advanced

- 1. What are the 3 major classes of platyhelminthes and describe them.
 - 1. _____

 - 2. _____

 - 3. _____

- 2. Name an example of a nematoda and describe its lifecycle.

- 3. What are the three major classes of annelida and how do they move?
 - 1. _____

 - 2. _____

 - 3. _____

- 4. Answer the following:

Distinguish between the following body structures: coelomates, pseudocoelomates, and acoelomates

Which body structures are common in the three phyla of worms?

- 5. Be able to demonstrate three ways to purify water.

- 6. Complete the following:

From what you have learned about worms. Why is the availability of fresh water so important to human health, especially in third world countries?

Organize a fund raise to support organizations that strive to provide fresh water to third world countries.

- 8. Describe a spiritual lesson about living water from the Bible.

South Pacific Division Honors

Aboriginal Lore
Abseiling
Abseiling, Advanced
Abseiling, Instructor
Bible Marking
Bible Marking, Advanced
Cetaceans
Eucalypts
Herbs
Kayaking
Maori Lore
Marsupials
Music, Beginners
Music
Music, Advanced
Parrots and Cockatoos
Puppetry
Puppetry, Advanced
Skateboarding*
 (* Voted not to be used in North American because of insurance regulations.)
Triathlon
Triathlon, Advanced
Upholstery
Video
Wattles



Pathfinder's Name

Aboriginal Lore

1. Who are the Aborigines and where did they come from?

How many tribes were there when European colonization commenced?

2. Discuss the tribal system. What are totems?

3. Discuss the food of the Aborigines:
Kinds _____

How obtained _____

How prepared _____

4. Discuss their homes. Of what are they made and why are they not permanent?

Where do the young men and boys sleep?

- 5. How do they communicate with other tribes who may not understand their language?

How do they send signals within the tribe?

What is the purpose of the Tjuringa (or Churinga)?

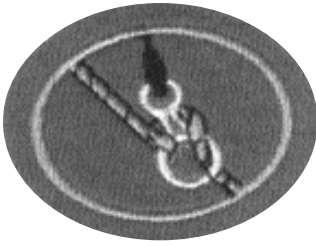
- 6. What are some of the articles of trade and exchange?

What domestic utensils do they use.

- 7. Describe some of the weapons used in hunting and warfare.

- 8. What is a corroboree?

Explain its purpose.



Pathfinder's Name

Abseiling

1. a. List and explain the safety rules

- b. Explain the "dangers of falling" chart.

2. Explain the uses of the following knots:

Tape _____

Alpine butterfly _____

Figure of eight loop _____

Double fishermans _____

Prussik _____

Bowline _____

- 3. Draw the diagrams for the setting up of the following abseil descents:
 - a. Single rope technique

- b. Canyoning setup

- ❑ 4. Know the ways to identify safe anchors in various circumstances.

Trees _____

Boulders _____

Bollards _____

- ❑ 5. Explain the various verbal calls.

- ❑ 6. Explain the principle of belaying and the three methods used.

Give the advantages and disadvantages of each method:

	Advantages	Disadvantages
Body belay	_____ _____ _____	_____ _____ _____
Mechanical belay	_____ _____ _____	_____ _____ _____
Base belay	_____ _____ _____	_____ _____ _____

- 7. List the rules for care of ropes.

- 8. Explain the difference between dynamic and static rope.

- 9. Know the right type of equipment needed for abseiling.

- 10. Know the best way to store your ropes, e.g. coiling and chaining.

- 11. a. Know which descending device to use in different abseils.

- b. Give reasons why you chose that device

On/off time _____

Security _____

Heat _____

Versatility _____

- 12. Know about how to treat a patient for the following injuries:

Sprains _____

Concussion _____

Hypothermia _____

Broken bone _____

Shock _____

13. Explain how to perform the following rescues:

The pulley system _____

The change-over method _____

SECTION TWO-PRACTICAL

1. Pass the abseiling exam with a pass mark of 60%. The exam is available from the conference youth ministries office, or through the instructor.

Date of examine _____

Mark _____

2. Answer the questions on the following topics:

- a. Uses of the six abseiling knots
- b. What are, and give the meaning of the standard climbing calls
- c. Uses of various descenders
- d. Give seven rules for are of rope
- e. Give seven rules for safety
- f. Know about first aid and how to treat patients
- g. Give five ways to detect faults of ropes

3. Perform the following tasks:

- a. Tie the six knots
- b. Set up the single rope setup and canyoning setup
- c. Witness a cliff rescue demonstrated by the instructor
- d. Coil and chain a rope
- e. Set up the belay methods

4. From a minimum height of 10 meters, complete two abseils on each of the following devices, and know how to attach them to the rope:

- a. Whale tail
- b. Robot
- c. Harpoon (easy access)
- d. Figure of eight

- e. Piton-brake bar
- f. Rappel-rack
- g. Harpoon (conventional)
- h. Cross karabiner

- 5. Explain how to do the classic abseil, and over the shoulder abseil, for emergency use.

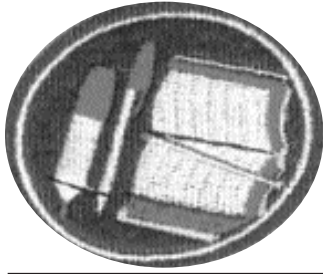
- 6. Be able to prussik a ten-meter cliff.

Abseiling, Advanced

- 1. Repeat the theory and practical requirements for the Abseiling Honor
Date completed _____
- 2. Pass the exam with 80% pass mark.
Date of examine _____
Mark _____
- 3. Abseil over a knot in the rope.
Date completed _____
- 4. Abseil over an overhand or cave.
Date completed _____
- 5. Demonstrate the pulley method of cliff rescue.

Abseiling, Instructor

- 1. Instruct how to abseil, being confident in every aspect of the Abseiling Honor.
Date completed _____
- 2. Demonstrate all the theory to a class.
Date completed _____
- 3. Teach abseiling first aid to a class.
Date completed _____
- 4. Lead at least two abseiling expeditions checking the safety of each individual.
Date completed _____
Date completed _____



Pathfinder's Name

Bible Marking

1. a. Name five different methods of Bible Marking.

1. _____

2. _____

3. _____

4. _____

5. _____

- b. Explain how each method would be used.

1. _____

2. _____

3. _____

4. _____

5. _____

- c. List advantages and disadvantages of each.

1. _____

1. _____

2. _____

2. _____
3. _____
3. _____
4. _____
4. _____
5. _____
5. _____

2. List five guidelines you would consider before starting to mark your Bible.

1. _____
2. _____
3. _____
4. _____
5. _____

3. a. What method would you follow for giving a Bible study and why?

b. And mark your Bible for two topics/subjects using this method.
Topics/Subjects

1. _____
2. _____

4. a. What methods would you use for ongoing devotional study and why?

b. And mark your Bible for two topics/subjects using one of these methods, and using a minimum of ten texts each.

Topics/Subjects

1. _____

1. _____ 6. _____

2. _____ 7. _____

3. _____ 8. _____

4. _____ 9. _____

5. _____ 10. _____

2. _____

1. _____ 6. _____

2. _____ 7. _____

3. _____ 8. _____

4. _____ 9. _____

5. _____ 10. _____

Bible Marking, Advanced

1. Mark an additional two Bible studies using a minimum of twenty texts each.

1. _____

1. _____	11. _____
2. _____	12. _____
3. _____	13. _____
4. _____	14. _____
5. _____	15. _____
6. _____	16. _____
7. _____	17. _____
8. _____	18. _____
9. _____	19. _____
10. _____	20. _____

2. _____

1. _____	11. _____
2. _____	12. _____
3. _____	13. _____
4. _____	14. _____
5. _____	15. _____
6. _____	16. _____
7. _____	17. _____
8. _____	18. _____
9. _____	19. _____
10. _____	20. _____

- 2. Using a concordance mark ten texts for devotional study

1. _____	6. _____
2. _____	7. _____
3. _____	8. _____
4. _____	9. _____
5. _____	10. _____

- 3. In writing:

a. State the guidelines taken to maintain a clear marking procedure.

b. Provide a key to understanding your Bible markings.

- 4. Give a Bible study from an outline you have marked.

Date of Bible study _____



Pathfinder's Name

Cetaceans

1. In what way is the Cetaceans family different to most other sea life?

2. Explain the difference between Baleen and Toothed Whales.

Baleen _____

Toothed _____

3. In what way have Whales and Dolphins been a benefit to man?

4. Explain how it is that a Whale which breeds in the warm waters of the tropics can also survive the ice cold water of the Antarctica where they go to feed, (considering the whale is a warm blooded mammal like humans).

5. Memorize the following Scriptures concerning whales:

a. Genesis 1:21

c. Job 7:12

b. Ezekiel 32:2

d. Matthew 12:40

6. Write and read to a group, or tell from memory, the story of Jonah.

- ☐ 7. Successfully draw a Baleen Whale and identify where the following body parts are:

- | | | | |
|----|---------------|----|--------------|
| a. | Baleen Plates | g. | Flukes |
| b. | Blowhole | h. | Flippers |
| c. | Dorsal Fin | i. | Genital Slit |
| d. | Ear | j. | Median Notch |
| e. | Eye | k. | Peduncle |
| f. | Throat Pleats | | |

- ☐ 8. Be able to identify at least fifteen Cetaceans.

- | | | | |
|----|-------|-----|-------|
| 1. | _____ | 9. | _____ |
| 2. | _____ | 10. | _____ |
| 3. | _____ | 11. | _____ |
| 4. | _____ | 12. | _____ |
| 5. | _____ | 13. | _____ |
| 6. | _____ | 14. | _____ |
| 7. | _____ | 15. | _____ |
| 8. | _____ | | |



Pathfinder's Name

Eucalypts

1. How many different species of Eucalypts have been named in Australia?

2. Where does the name Eucalypt come from?

To what family do Eucalypts belong? _____

3. In what other parts of the world do Eucalypts grow?

In how many are they indigenous to that country?

4. Which country has the tallest Hardwood? _____

Where is it growing? _____

How tall is it? _____

Which country has the tallest flowering trees? _____

5. Into what groups are Eucalypts divided and what feature is used for this purpose?

6. How do Eucalypts adapt to

Frequent bush fires? _____

Arid regions? _____

- 7. From what species do they extract Eucalyptus oil?

Where is it done in Australia?

- 8. Name ways in which Eucalypts help man, animals, birds, insects.

- 9. Make a collection of 15 different species of Eucalypts that you can identify and draw or trace or collect the fruit of each showing date and place and name of collector.



Pathfinder's Name

Herbs

1. List 25 culinary herbs and their uses.

	Culinary Herbs	Uses
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____
15.	_____	_____
16.	_____	_____
17.	_____	_____
18.	_____	_____
19.	_____	_____
20.	_____	_____

2. List 25 medicinal herbs and their uses.

	Medicinal Herbs	Uses
1.	_____	_____
2.	_____	_____
3.	_____	_____

4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____

3. Cook one dish using herbs.

Herb cooked _____

4. Make one of the following herbal products:

- a. Cream
- b. herb pillow
- c. jam
- d. soap, paper

Product made _____

5. Make one batch of potpourri.

6. Make one pomander.

7. Name and identify 5 herbs growing wild near you.

1. _____ 4. _____

2. _____ 5. _____

3. _____

8. Name 5 herbs you can use for dying and state the color they give.

1. _____ 4. _____
 2. _____ 5. _____
 3. _____

9. Name 5 herbs that can be used in insect control.

1. _____ 4. _____
 2. _____ 5. _____
 3. _____

10. Grow 5 culinary herbs for 3 months.

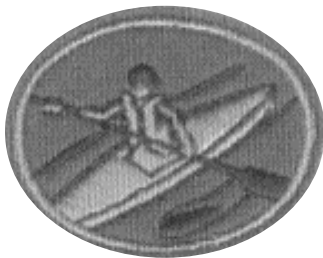
1. _____ 4. _____
 2. _____ 5. _____
 3. _____

11. Name 5 herb plants that particularly attract bees.

1. _____ 4. _____
 2. _____ 5. _____
 3. _____

12. Name 5 herbs mentioned in the Bible and give the Bible references for them.

	Herbs	Bible reference
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____



Pathfinder's Name

Kayaking

Qualified Instructor Required

Prerequisite: Intermediate Swimming Honor

1. Satisfy the examiner that you have knowledge of different types of kayaks (Slalom, river, touring, sea); the uses for each and the equipment necessary for safe kayaking (helmet, life jacket, sprayskirt, bow and stern loops, floatation in kayak).

Examiner's signature _____

2. Demonstrate an ability to enter and exit a kayak.
- a. From a beach
 - b. From a pier or landing
 - c. From deep water
3. Demonstrate ability to complete the following strokes:
- a. Straight forward and backward paddle
 - b. Left and right turn by forward and back paddling
 - c. Draw (sweep) stroke
 - d. Support stroke
 - e. Cross current paddling
4. Explain the steps involved in Eskimo rolling and demonstrate the proper method of doing this.

5. Explain how to repair a hole in fiberglass:
Permanently in a workshop (fiberglassing)

Emergency repair on the riverbank (duct tape)

- ❑ 6. After completing a minimum of 2 training sessions complete either
 - a. An overnight kayak trip
 - b. Two day trips (one including some white water)

Trip chosen _____

Date of trip _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Maori Lore

1. Define the following commonly used terms:

Maree _____

Powhiri _____

Karakia _____

Mate _____

Waiata _____

Korero _____

Haka _____

Kuia _____

Tane _____

Wero _____

Mana _____

Manuhiri _____

Hongi _____

Hui _____

Poroporoaki _____

Whanau _____

Tangi _____

Aroha _____

Whakaino _____

Koro _____

Kaumatua _____

Wahine _____

Mihi _____

Whaikorero _____

Tangata whenua _____

Taonga _____

- ❑ 2. a. Draw or trace a map of the world and show with arrows the directions of Polynesian settlement.
- b. Where do Maoris consider themselves to have come to New Zealand from?

- c. Explain what the Great Migration Myth is.

Who was the originator of the myth?

What were the canoes that arrived in this migration and where did they come from?

- d. Draw or trace a map of New Zealand showing all the major tribal areas, and make in the canoe for each. (SIC)
- e. Why was Rangitoto named “Rangitoto”?

- ❑ 3. Visit a marae with a group that has been called to a hui. Write a report on the events that take place from the time you arrive at the marae to the time you leave. State the name of the marae, its locality and the tribe to which it is affiliated.

- ❑ 4. Briefly relate the customs observed at each of the following events:

Mate _____

Meal times _____

Speeches _____

Sleeping _____

- ❑ 5. a. What are the two Maori religions currently in use today, and what are some of their characteristics?

Religions	Characteristics
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- b. Briefly describe the Maori story of creation.

- c. Briefly outline the story of Seventh-day Adventism among the Maori people.

- d. What is the Maori attitude to religion in general?

- 6. Make a sample tukutuku panel (approx 30cm x 30cm) OR a tipare OR a small flax mat/basket.
- 7. Know how to correctly:
 - a. Greet people in Maori
 - b. Hongi
- 8. a. What are five different pastimes enjoyed by Maori children in former times?
 - 1. _____
 - 2. _____
 - 3. _____
 - 4. _____
 - 5. _____
- 8. b. Learn how to do three string figures and walk on stilts.
- 9. Visit an old pa site in your locality and make a brief written report on what you could see.



Pathfinder's Name

Marsupials

- 1. Distinguish:
 - a. Mammal from other animals.
 - b. Placentals, marsupials and monotremes from one another.
- 2. Understand how marsupials are classified into families and describe, in a general way, the habits of these families.

Families

Habits

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

- 3. Describe the distribution, habitat (i.e. type of country they live in), diet breeding behavior, as well as any other interesting information of twelve different groups of marsupials and monotremes.

Marsupials/Monotremes

Description

1.	_____	_____
	_____	_____
	_____	_____
2.	_____	_____
	_____	_____
	_____	_____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

- 4. Be able to explain the difference between marsupial reproduction and that in true mammals (i.e. placentals).

- 5. Explain the significance of the direction of opening of the pouch and the number of young per litter in marsupials.

- 6. Give an explanation of the unique occurrence of marsupials in Australia.

- 7. Be able to explain the need for conservation of our marsupials.



_____ **Pathfinder's Name**

Music, Beginners

- 1. Pass in Grade 2 Practical AMEB, or Trinity College, or Royal Schools of Music, or Suzuki Method Graduation Level 1.
- 2. Pass in Grade 1 Theory and Musicianship.
- 3. Play or sing ten choruses or hymns.

Date completed _____

Instructor's Signature _____

**South Pacific Division
2002 Edition**

Music

- 1. Complete the Beginners Music Honor.
- 2. a. Pass in Grade 5 Practical AIMEB, or Trinity College, or Royal Schools of Music, or Suzuki Graduation Level 3.
b. Pass in Grade 3 Musicianship or Theory.
- 3. Submit a list of thirty hymns and/or choruses you can play or sing and be tested on these at random.

OR

- 1. Play or sing a scale, and know its composition.
- 2. Write a scale in both treble and bass clefs.

- 3. Know a half tone, a whole tone, a third, a fifth and an octave.
- 4. Be able to distinguish a march from a waltz, and give the time of each.
March _____ Waltz _____
- 5. Define the following. Draw the symbols for each
What is a quarter note?

A half note?

A whole note?

-
6. Name five great composers and one composition of each, including an oratorio, a piano composition, a song.

	Composer	Composition
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____

7. Play (a hymn), or sing from memory one stanza of thirty hymns or choruses.

	Hymn/Song/Chorus	Composer
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____
7.	_____	_____
8.	_____	_____
9.	_____	_____
10.	_____	_____
11.	_____	_____
12.	_____	_____
13.	_____	_____
14.	_____	_____
15.	_____	_____
16.	_____	_____
17.	_____	_____

18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____

8. Play, or sing from memory, one piece of good music.

Music _____

9. For instrumentalists: play at sight a moderately difficult piece and explain all signs and terms in it.

Music _____

10. For singers: Show with a baton how to lead a group in singing compositions written in 3/4 and 4/4 time.

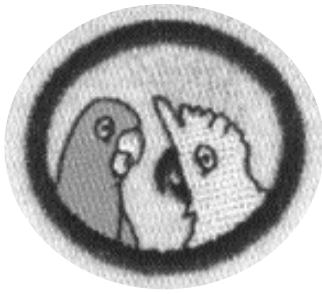
11. Define orchestra

Name at least five instruments in an orchestra.

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | |

Music, Advanced

- 1. Complete the Music Honor.
- 2. Pass in Grade 7 Practical AMEB, or Trinity College, or Royal Schools of Music, or Suzuki Graduation Level 5.
- 3. Be able to play or sing any hymn chosen at random from the Church Hymnal or Sabbath School chorus books.



Pathfinder's Name

Parrots and Cockatoos

1. Name 15 species of parrot and five species of cockatoo that are common to Australia and be able to identify them from real life or pictures.

Parrots

- | | |
|----------|-----------|
| 1. _____ | 9. _____ |
| 2. _____ | 10. _____ |
| 3. _____ | 11. _____ |
| 4. _____ | 12. _____ |
| 5. _____ | 13. _____ |
| 6. _____ | 14. _____ |
| 7. _____ | 15. _____ |
| 8. _____ | |

Cockatoo

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | |

2. Name two species of parrot that builds its nest in a termite mound and tell where each is found.

Species	Location
1. _____	_____
2. _____	_____

3. Where in Australia would you find each of the following and describe the natural diet of each.

Long Billed Corella

Location	Natural Diet
_____	_____

Great Palm Cockatoo

Location

Natural Diet

Gang Gang Cockatoo

Location

Natural Diet

- 4. Which three species of cockatoo are known as the most rare?
 1.

 2.

 3.

- 5. Which is the largest species in the Rosella family?

Where does it come from and what is its usual food?

- 6. Every State of Australia has a Rosella that is common to that State. Some are found in more than one State but there is one that is commonly associated with your State. Which is it?

- 7. When the Eclectus parrot was first found it was thought that the Male and Female were of different species. Why was this?

Where are they found and what is their usual diet?

- ❑ 8. What Australian cockatoo is regarded as the most beautiful in the world?

Describe what it looks like and where it is found.

- ❑ 9. Name four different Lorikeets and tell why they all have brush tongues.

	Lonikeets	Why
1.	_____	_____

2.	_____	_____

3.	_____	_____

4.	_____	_____

- ❑ 10. Be able to describe the nest of any one of the above parrots or cockatoos and also tell the color of the egg.

	Color of egg	Nest
1.	_____	_____

2.	_____	_____

3. _____

4. _____

- 11. Make a list of all the parrots and cockatoos that are common to your area.



Pathfinder's Name

Puppetry

- 1. Make at least one puppet, and make/or buy two other puppets.
- 2. Develop at least three puppet characters with their own voices.

Characters

- 1. _____
- 2. _____
- 3. _____

- 3. Write three, two to three minute scripts.

Scripts

- 1. _____
- 2. _____
- 3. _____

- 4. Perform to any audience (not family or immediate friends) at least three times.

Dates of performances

- 1. _____
- 2. _____
- 3. _____

- 5. Obtain an assessment of each performance, by someone not related to the puppeteer.

Person _____

Date completed _____

Instructor's Signature _____

Puppetry, Advanced

Prerequisite: Puppetry Honor

- 1. Make at least two or more additional puppets.
- 2. Develop characters and voices for these puppets.

Characters

1. _____

2. _____

- 3. Write a ten-minute script.
- 4. Construct your own staging.
- 5. Give at least one church or public performance.

Dates of performance _____



_____ **Pathfinder's Name**

Skateboarding

1. Use the following safety gear and know why it should be worn when skateboarding.

Helmet _____

Elbow pads _____

Knee pads _____

High top boots _____

Wrist support gloves _____

2. Name all the parts of a skateboard.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

3. Completely disassemble and reassemble a skateboard, repacking the bearings and setting wheelnuts and truck pivoting nut at correct tension.

- ❑ 4. Demonstrate eight skateboarding skills which will include some of the following and do them to the instructors satisfaction on authorized property. Five of these should be demonstrated on a skateboarding ramp.

Tick Tack— from a standing start to a minimum of 10 meters on level ground

Ollie—minimum of 10 centimeters

Rail Slide—minimum of 1 meter

Drop In—off a ramp 2-3 meters high

Gurreo Slide

4-Wheel Look Up

Pump on a ramp up to the Coping

Acid Drop

Kick Flip

Ollie up a Gutter

Front-Back side grind

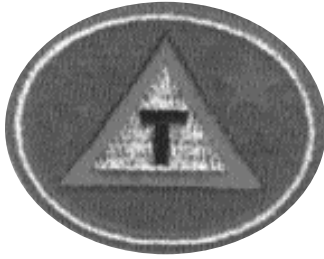
Carve

Pump

**** Note:** The Skateboarding honor is not available in the North American Division because of insurance regulations.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Triathlon

1. Give three Bible principles and two Spirit of Prophecy principles to support exercise.
- Bible principles
1. _____
2. _____
3. _____
- Spirit of Prophecy principles
1. _____
2. _____
2. Give a report on the correct diet to maintain peak physical condition and how this was maintained for the duration of training. Include fluid intake during and precompetition, and in-competition food intake.
3. a. Give guidelines for correct training, including warm-up, stretching, injury prevention, prevention of overtraining, etc.
- b. Present your regular training program.
- c. List the correct equipment, including bike, shoes, clothing.
4. Exhibit knowledge of the techniques of swimming, cycling and running.
5. Compete in all three aspects of a recognized triathlon event, either solo or as a team member, where the triathlon is similar to:
- a. Swim—500m
- b. Cycle—15km
- c. Run—10km
- d. within 4.5 hours
- Date completed _____

Date completed _____

Instructor's Signature _____

Triathlon, Advanced

- 1. Have the Triathlon Honor.
- 2. Developing a training schedule for yourself.
- 3. Keep a training log for two months. (Complete Chart #1)
- 4. Participate in an Advanced Triathlon as a solo participant, where the triathlon is similar to:
 - a. Swim—1.5km
 - b. Cycle—40km
 - c. Run—10km
 - d. within 4.5 hours

Date completed _____

Triathlon, Advanced, Chart #1

Month: _____

Day 1 Swim: Bike: Run:	Day 8 Swim: Bike: Run:	Day 15 Swim: Bike: Run:	Day 22 Swim: Bike: Run:	Day 29 Swim: Bike: Run:
Day 2 Swim: Bike: Run:	Day 9 Swim: Bike: Run:	Day 16 Swim: Bike: Run:	Day 23 Swim: Bike: Run:	Day 30 Swim: Bike: Run:
Day 3 Swim: Bike: Run:	Day 10 Swim: Bike: Run:	Day 17 Swim: Bike: Run:	Day 24 Swim: Bike: Run:	Additional Notes:
Day 4 Swim: Bike: Run:	Day 11 Swim: Bike: Run:	Day 18 Swim: Bike: Run:	Day 25 Swim: Bike: Run:	
Day 5 Swim: Bike: Run:	Day 12 Swim: Bike: Run:	Day 19 Swim: Bike: Run:	Day 26 Swim: Bike: Run:	
Day 6 Swim: Bike: Run:	Day 13 Swim: Bike: Run:	Day 20 Swim: Bike: Run:	Day 27 Swim: Bike: Run:	
Day 7 Swim: Bike: Run:	Day 14 Swim: Bike: Run:	Day 21 Swim: Bike: Run:	Day 28 Swim: Bike: Run:	



Pathfinder's Name

Upholstery

1. Know five of the following terms used in upholstery to describe the tools and give their uses:

Tack Claw _____

Use _____

Staple Remover _____

Use _____

Regulator, Mattress Needle _____

Use _____

Magnetic Hammer _____

Use _____

Sharp Knife or "Snap" blade knife _____

Use _____

Work Table _____

Use _____

Industrial Sewing Machine _____

Use _____

Sundry Items _____

Use _____

- ❑ 2. Explain the use of the following items:

Webbing _____

Staples and Tacks _____

Hessian _____

Buttoning Cord or Waxed Flax _____

Calico _____

Fibre _____

Flock _____

Foam Sheeting _____

Glues _____

Back Tacking Strip _____

- ❑ 3. Name two types of material used for upholstery.

1. _____

2. _____

- ❑ 4. Explain how to fit the top cover to a lid.

5. What is the name of the material used for the base of lounges and the base of your box etc., and what is its purpose?

6. Name two methods of attaching covers to chairs.

1. _____

2. _____

7. Complete a or b:

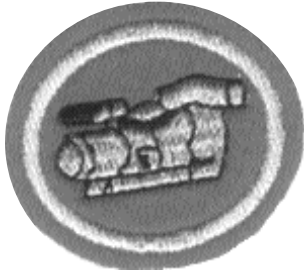
- a. Ottoman
- b. Toybox

Project _____

Date completed _____

8. Complete a Feature Panel.

Date completed _____



Pathfinder's Name

Video

1. Be familiar with the type of videos available. Know the difference between VHS-C and Video 8 tapes.
- VHS-C _____
- _____
- Video 8 _____
- _____
2. Identify the following parts on a video camera and know how to use them:
- a. Viewfinder
 - b. Record button
 - c. Lens
 - d. Zoom button
 - e. Power on/off switch
 - f. Manual focus and zoom levers/rings
 - g. Tape loading door
 - h. Time lapse switch
3. Know what the viewfinder messages mean.
4. Identify and change the battery. Know how to charge up the battery and when to replace-recharge the battery. Know how to get the best life from the Ni-cad battery.
5. How else can the camera be powered?
- _____
6. Video a five minute segment then view with your instructor. Discuss your technique including the following and learn how to correct if necessary:
- a. Zooming
 - b. Lighting
 - c. Panning
 - d. Steadiness of camera
- Date completed _____
7. Demonstrate how to set up and use a tripod.
- Date completed _____

- 8. Demonstrate how to edit video using a VCR by editing segment taken for requirement 6.

Date completed _____

- 9. Demonstrate your ability to use titles and design your own by hand or computer.

Date completed _____

- 10. Complete one of the following and show it in a public place. Length of video clip must be 4-7 minutes.

- a. Object lesson
- b. Music video clip
- c. Bible story (dramatized, puppets, acted etc.)
- d. Nature
- e. Modern life dilemma
- f. Advertisement for church program, publication, etc.

Project _____

Date shown _____



Pathfinder's Name

Wattles

- 1. What is the approximate number of named varieties of wattles in Australia?

- 2. What are phyllodes? _____

What work do they do for the plant?

Why are phyllodes so important in the study of acacias?

- 3. How are acacias classified into two major groups?

- 4. How does the shape of the seed pod and the way the seeds lie in the pod help in identification?

- 5. How many acacias in your state have true leaves (bipinnate) when adults?

- 6. In seeding acacias what is seen first, true leaves or phyllodes? _____
How many have true leaves? _____
- 7. What must happen to an acacia seed before it will germinate and grow?

8. What acacias phyllodes are used to feed stock in times of drought?

9. What is the bark of some acacias used for in Australia?

10. What species of acacias are used for furniture making?

11. How do acacias help and benefit man, animals, insects, birds?

12. Make a collection of 10 or more dried pressed wattles with flowers and phylloids and where possible pods and seeds. Show dates, place collected, common and scientific names. Some must be spike type flowers, some raceme type or single balls and some bipinnate leaves. (Complete Chart #1)

OR

20 or more close-up photographs you have taken of wattles showing the above details.

South Pacific Division/Island Ed. Index

Canoe Building
Cultural Food Preparation
Cultural Heritage
Island Fishing
Mat Making
Native Bush Construction
Palm Trees
Subsistence Farming
Tapa Cloths
Tree Climbing



Pathfinder's Name

Canoe Building

1. What trees in your area are used for building canoes?

Name them in your language.

Are they considered softwoods or hardwoods?

2. What trees are used for building canoes, softwoods or hardwoods?

3. What tools are used for building canoes?

Start with felling the tree up to completion.

4. Choose a good canoe tree about four meters in length and observe the correct felling of it. Explain what happened.

5. Describe how a log is prepared to build a canoe.

- 6. With the help of others properly shape the outside of the canoe and hollow out the inside. Correctly smooth both surfaces inside and outside.
Date completed _____
- 7. Assist in the making of paddles, seats, poles and fittings for the canoe.
Date completed _____
- 8. Assist in the construction of decking, outrigger, mast and sail if the canoe is of a double hull or outrigger type.
Date completed _____
- 9. Make a tree model of the type of canoe used in your district.
Date completed _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Cultural Food Preparation

Cook a meal using local methods and foods by yourself.

See example below.

Materials

- 1. Raw foods (e.g. Dalo, cassava, yams, sweet potatoes, taro leaves, etc.)
- 2. Banana leaves or other leaves used in your area.
- 3. Stones
- 4. Firewood
- 5. Banana stems
- 6. Coconut leaves

Methods

- 1. Light the fire first.
- 2. Pile the firewood in order (criss-cross method).
- 3. Put all the stones on top of the firewood.
- 4. Let the fire completely burn the wood until you notice that the stones are red-hot.
- 5. Clean the lovo/oven.
- 6. Put the smashed up banana stems on top of the stones.
- 7. Start to put all the raw foods on top of the banana stems,
- 8. Cover it up first with green coconut leaves before you completely cover it with leaves and leave it for one to one and a half hours.
- 9. Uncover the lovo/oven and the food is ready.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Cultural Heritage

1. Outline why it is important to know about our cultural heritage.

2. List the special ceremonies for

The birth of a child _____

Becoming an adult _____

Death and burial _____

3. List the customary ways of dressing for everyday life and two special occasions.

1. _____

2. _____

Special Occasions

1. _____

2. _____

- b. Draw, explain or present in pictures these customary dresses.

- 4. What is or was the customary pre-marriages for young people in your area?

How is/was marriage arranged?

- 5. List the advantages of traditional marriages over western style marriages and courtship.

- 6. Explain briefly the meaning of the term “bride price.”

What are the advantages of bride price.

Explain the disadvantages of bride price.

- 7. Explain the leadership structure in your village area. (Include the chiefly system and the extended family.)



Pathfinder's Name

Island Fishing

1. Name five native methods that are used for island fishing.
1. _____
 2. _____
 3. _____
 4. _____
 5. _____

2. Demonstrate your ability to make at least one type of fishing gear out of native material used in your area.

Types of fishing gear made

1. _____

3. In your cultural setting identify types of fishing according to tides and phases of the moon.

4. Display and label a collection of baits, lures and hooks traditionally used in your area.

5. Participate in a fishing trip and catch two fish using two different traditional methods.

Fish

Methods used

1. _____

2. _____

6. a. Collect pictures of ten tropical fish and identify their local names and their habitation.

- b. Name ten poisonous or dangerous fish in your area.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____
8. _____
9. _____
10. _____

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Mat Making

1. In your culture name the materials which are used in mat making.

2. Explain and demonstrate how to prepare this material.

3. Name plants that can be used for making dyes in your culture. Tell where they come from and how to prepare them for dyeing. (Complete Chart #1)

4. Show how to use native and synthetic dyes in dyeing mat making material.

5. Make two mats showing two different types of weaving. One of the mats must have a reasonably fine weave.

Mats

Types of Weaving

1. _____
2. _____

Date completed _____

Instructor's Signature _____



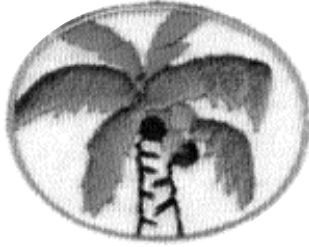
Pathfinder's Name _____

Native Bush Construction

- 1. Assist in setting out the ground of a simple house squarely and accurately.
- 2. Assist with choosing and cutting proper timber from the bush for posts, floor, rafters, wall plates, studs, steps and doors.
- 3. a. Plait local materials for walls.
b. Make sections for a wall 1m x 1m and show two different wall patterns.
- 4. Show ability to thatch a roof correctly, especially the ridge and hips using kunai grass, sago palm leaves, coconut palm leaves or any other materials.
- 5. Where applicable select, prepare and use vines for tying and lashing.
- 6. Take part in building a house not less than 4m x 2m using native materials. In building the house practice all demonstrations nos. 1-5. Show while building the house that you have taken measures to keep it free from termites.
- 7. Demonstrate ability to name, use and care for the following tools: ax, saw, hammer, chisel, bush knife, ruler and tape spade.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Palm Trees

1. Give the general characteristics of the palm tree referring to the following parts:

Stem or trunk

Roots

Leaves

Inflorescence or flowers

Fruits

2. What happens when the crown of a palm is cut out?

What happens when the trunk of a palm is damaged?

3. In the Pacific islands there are several species of palm trees which are helpful to man. Name two of these and list as many ways as you can how each helps man.

Palm Trees

Helpful to man

1. _____

2. _____



Pathfinder's Name

Subsistence Farming

- 1. Participate in the preparation of a food garden nine meters square. Cover the following points.
 - a. Choosing the site
 - b. Clearing the bush
 - c. Cleaning the area
 - d. Preparation of the soil for planting
- 2. Through a practical demonstration show how you will make and use compost in your garden.
- 3. List the crops from the following plant families you will plant in your garden and the time of year that you can do this.

Root crops—e.g. cassave, sweet potatoes, carrots

Plants

Time of year

_____	_____
_____	_____
_____	_____
_____	_____

Grass—e.g. corn, sugar cane

Plants

Time of year

_____	_____
_____	_____
_____	_____
_____	_____

Legumes—e.g. beans, peanuts

Plants

Time of year

_____	_____
_____	_____
_____	_____
_____	_____

Leafy vegetables—e.g. cabbage varieties, aibika

Plants

Time of year

_____	_____
_____	_____
_____	_____
_____	_____

Fruit—e.g. Bananas, pawpaw, tomatoes, egg plant, pumpkins, cucumber

Plants

Time of year

_____	_____
_____	_____
_____	_____
_____	_____

4. Show by practical demonstration and by diagram how you will divide your garden to plant your crops.

5. What crops will best grow where you have burnt out stumps and logs?

6. Show and demonstrate how you will keep your garden free from weeds and garden pests.

7. Demonstrate how you will plant your crops to have a continual supply.

8. Show how to harvest crops for family use and commercial sale.

9. Show how you will rotate your crops.

10. Outline what you would do with your garden area after several seasons of cropping.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Tapa Cloths

1. What are the main uses of Tapa cloth?
- _____
- _____
- _____
2. Know three different ways that Tapa cloth is made in the Pacific Islands.
1. _____
2. _____
3. _____
3. Know the trees used for making Tapa cloth in your area.
- _____
- _____
4. a. Explain the steps in making tapa cloth and then demonstrate your knowledge by making a 1/2 meter square tapa cloth.
- _____
- _____
- _____
- _____
- _____
- b. Explain the process of dying tapa cloth using natural dyes and decorate your tapa cloth.
- _____
- _____
- _____
- _____
- _____
5. Make a collection of a number of different types of tapa cloth designs and outline the purpose for which they were used.

Date completed _____

Instructor's Signature _____



Pathfinder's Name

Tree Climbing

- 1. Practice your tree climbing skills a number of times on a 10-15 foot tree.
- 2. Climb a 20-foot coconut tree. Demonstrate the manner of getting back down to the ground safely.
- 3. a. Climb a tree using any one of four common methods.
Method used _____
b. Describe the other methods in details to the instructor.
- 4. The instructor should select trees suitable for climbing; one with lots of branches, the other a coconut tree.

Each person must demonstrate on each of the two trees how to apply the two methods of tree climbing (squat hopping and monkey type.)

Tree	Method used
1. _____	1. _____
	2. _____
2. _____	1. _____
	2. _____

- 5. Demonstrate how you would safely carry a bush knife and an axe up a tree.
- 6. a. Climb a coconut tree demonstrating how you would carry a bag.
b. Remove a coconut without using a knife or sharp instrument using only your limbs and return to the ground with it in your bag.
- 7. Know how to remove an injured person from a tree.

Date completed _____

Instructor's Signature _____

North American Division of the Seventh-day Adventist Church Honor Submission Form

Date Submitted: _____

Submitted by: _____

Club Name: _____

Conference Name: _____

Piloted by:	Director Name	Pathfinder Club	Number of Participants
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I, _____, Pathfinder Director of the _____ Conference
recommended this Honor to the NAD Pathfinder Honors Committee on _____.
Date

Signed

Process:

1. The Conference Director of Pathfinder Ministries will submit the Honor proposal by January 1, to the NAD Director of Pathfinder Ministries.
2. The new Honor proposal will be considered by the NAD Pathfinder Honor Committee. Recommendations on whether to accept the honor proposal as submitted, or indicate the need for possible changes, or rejection of the proposal will be made to the NAD Pathfinder Committee.
3. The NAD Director of Pathfinder Ministries will write the Conference Director of Pathfinder Ministries with information on the recommendations made by the NAD Pathfinder Committee on the Honor proposal submitted.

Continued on next page

4. Honor proposals need to be type written and double spaced. Please submit hard copy and electronic version of the requirements and answers to requirements, along with a proposed patch design.



General Conference and
Division honor patch sample
of size and shape



Union, Conference and club
honor patch sample of size
and shape

5. New Honor proposals should be submitted after Honors have been piloted by at least three (3) local Pathfinder Clubs in the Conference submitting the honor. A written statement by the Conference's Director of Pathfinder Ministries to the NAD Director of Pathfinder Ministries stating that the Honor being proposed has been piloted, needs to accompany the new Honor proposal.

Check List for Evaluating Honors

- ___ 1. All requirements uphold the basic standard and philosophy of the Seventh-day Adventist Church.
- ___ 2. Requirements include a balance of theory and “hands on” experience.
- ___ 3. If possible, requirements have been developed in the areas of Basic and Advanced. Having the Basic Honor should be the pre-requisite for earning the Advanced Honor in a given subject.
- ___ 4. Requirements are usable in a group setting or by a single individual.
- ___ 5. Requirements can be fully completed in less than three months.
- ___ 6. Requirements clearly state in simple terminology exactly what is to be accomplished. (Avoid ambiguous words or phrases such as: explain briefly, submit, explain orally, or demonstrate ability.)
- ___ 7. Activity requirements of extended time are worded so as to avoid conflicts with school or work schedules. (Examples: a four day campout could be done in two weekends.)
- ___ 8. Requirements avoid destruction of animal or plant life. (Ask for photos or drawings as opposed to collections.)
- ___ 9. Requirements avoid involvement in armed or unarmed defenses.
- ___ 10. Requirements can be accomplished without unduly affecting the safety of its participants.





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Fungi	General Conference—Nature
Gardening	General Conference—Outdoor Industries
Geocaching	North American Division—Recreation
Geocaching, Advanced	North American Division—Recreation
Geology	General Conference—Nature
Geology, Advanced	General Conference—Nature
Genealogy	North American Division—Arts, Crafts & Hobbies
Genealogy, Advanced	North American Division—Arts, Crafts & Hobbies
Glass Craft	General Conference—Arts, Crafts & Hobbies
Glass Etching	North American Division—Arts, Crafts & Hobbies
Glass Painting	General Conference—Arts, Crafts & Hobbies
Goat Husbandry	General Conference—Outdoor Industries
Gold Prospecting	North American Division—Recreation
Gold Prospecting, Advanced	North American Division—Recreation
Grasses	General Conference—Nature
Health & Healing	General Conference—Health & Science
Heart and Circulation	North American Division—Health & Science
Herbs	South Pacific Division
Heredity	North American Division—Health & Science
Hiking	General Conference—Recreation
Home Nursing	General Conference—Health & Science

Horse Husbandry	General Conference—Outdoor Industries
Horsemanship	General Conference—Recreation
Horsemanship, Advanced	General Conference—Recreation
Hot Air Balloon	North American Division—Recreation
House Painting—Exterior	General Conference—Vocational
House Painting—Interior	General Conference—Vocational
House Plants	General Conference—Nature
Housekeeping	General Conference—Household Arts
Hunger Relief	North American Division—Outreach Ministries
Indian Lore	North American Division—Arts, Crafts & Hobbies
Indian Lore, Advanced	North American Division—Arts, Crafts & Hobbies
Insects	General Conference—Nature
Insects, Advanced	General Conference—Nature
Internet	North American Division—Vocational
Internet, Advanced	North American Division—Vocational
Island Fishing	South Pacific Div/Island Ed.
Journalism	General Conference—Vocational
Junior Witness	General Conference—Outreach Ministries
Junior Youth Leadership	General Conference—Outreach Ministries
Kayaking	South Pacific Division
Kites	General Conference—Recreation
Knitting	General Conference—Arts, Crafts & Hobbies
Knitting, Advanced	General Conference—Arts, Crafts & Hobbies
Knot Tying	General Conference—Recreation
Language Study	General Conference—Outreach Ministries
Lapidary	General Conference—Arts, Crafts & Hobbies
Laundering	General Conference—Household Arts
Leather Craft	General Conference—Arts, Crafts & Hobbies
Leather Craft, Advanced	General Conference—Arts, Crafts & Hobbies
Letter Boxing	North American Division—Recreation
Letter Boxing, Advanced	North American Division—Recreation
Lettering and Poster making	General Conference—Arts, Crafts & Hobbies
Lichens, Liverworts and Mosses	General Conference—Nature
Lighthouses	North American Division—Arts, Crafts & Hobbies
Lighthouses, Advanced	North American Division—Arts, Crafts & Hobbies
Literature Evangelism	General Conference—Outreach Ministries
Livestock	General Conference—Nature
Macramé	General Conference—Arts, Crafts & Hobbies
Mammals	General Conference—Nature
Mammals, Advanced	General Conference—Nature
Maori Lore	South Pacific Division
Maple Sugar	General Conference—Nature
Maple Sugar, Advanced	General Conference—Nature
Marine Algae	General Conference—Nature
Marine Invertebrates	General Conference—Nature
Marine Mammals	General Conference—Nature
Marsonry	General Conference—Vocational
Marsupials	South Pacific Division
Mat Making	South Pacific Div/Island Ed.
Metal Craft	General Conference—Arts, Crafts & Hobbies
Microscopic Life	General Conference—Nature
Model Boats	General Conference—Arts, Crafts & Hobbies
Model Cars	General Conference—Arts, Crafts & Hobbies

Model Railroading	General Conference—Arts, Crafts & Hobbies
Model Rocketry	General Conference—Arts, Crafts & Hobbies
Model Rocketry, Advanced	General Conference—Arts, Crafts & Hobbies
Moths and Butterflies	General Conference—Nature
Mountain Biking	North American Division—Nature
Music	General Conference—Arts, Crafts & Hobbies
Music, Beginners	South Pacific Division
Music	South Pacific Division
Music, Advanced	South Pacific Division
Native Brush Construction	South Pacific Div/Island Ed.
Navigation	General Conference—Recreation
Needle Craft	General Conference—Arts, Crafts & Hobbies
Nutrition	General Conference—Household Arts
Nutrition, Advanced	General Conference—Household Arts
Optics	General Conference—Health & Science
Orchids	General Conference—Nature
Orienteering	General Conference—Recreation
Origami	General Conference—Arts, Crafts & Hobbies
Outdoor Leadership	General Conference—Recreation
Outdoor Leadership, Advanced	General Conference—Recreation
Palm Trees	South Pacific Div/Island Ed.
Paper Maché	East Africa Division
Paper Quilling	North American Division—Arts, Crafts & Hobbies
Paper Quilling, Advanced	North American Division—Arts, Crafts & Hobbies
Paperhanging	General Conference—Vocational
Parade Float	North American Division—Outreach Ministries
Parade Float, Advanced	North American Division—Outreach Ministries
Parrots and Cockatoos	South Pacific Division
Peace Maker	North American Division—Outreach Ministries
Peace Maker, Advanced	North American Division—Outreach Ministries
Personal Evangelism	General Conference—Outreach Ministries
Photography	General Conference—Arts, Crafts & Hobbies
Physical Fitness	General Conference—Recreation
Physics	General Conference—Health & Science
Pigeon Raising	General Conference—Outdoor Industries
Pinewood Derby	North American Division—Arts, Crafts & Hobbies
Pinewood Derby, Advanced	North American Division—Arts, Crafts & Hobbies
Pioneering	General Conference—Recreation
Plaster Craft	General Conference—Arts, Crafts & Hobbies
Plastic Canvas	North American Division—Arts, Crafts & Hobbies
Plastic Canvas, Advanced	North American Division—Arts, Crafts & Hobbies
Plastics	General Conference—Arts, Crafts & Hobbies
Plumbing	General Conference—Vocational
Pottery	General Conference—Arts, Crafts & Hobbies
Poultry	General Conference—Nature
Poultry Raising	General Conference—Outdoor Industries
Power Boating	North American Division—Recreation
Preach It	North American Division—Outreach Ministries
Preach It, Advanced	North American Division—Outreach Ministries
Printing	General Conference—Vocational
Puppetry	South Pacific Division
Puppetry, Advanced	South Pacific Division
Quilting	General Conference—Household Arts

Radio	General Conference—Vocational
Radio, Advanced	General Conference—Vocational
Radio Electronics	General Conference—Vocational
Red Alert	General Conference—Health & Science
Refugee Resettlement	North American Division—Outreach Ministries
Reptiles	General Conference—Nature
Reptiles, Advanced	General Conference—Nature
Rock Climbing	General Conference—Recreation
Rock Climbing, Advanced	General Conference—Recreation
Rocks and Minerals	General Conference—Nature
Rocks and Minerals, Advanced	General Conference—Nature
Rowing	General Conference—Recreation
Rural Development	North American Division—Outreach Ministries
Sailing	General Conference—Recreation
Sanctuary	North American Division—Outreach Ministries
Sand	General Conference—Nature
Scrapbooking	North American Division—Arts, Crafts & Hobbies
Scrapbooking, Advanced	North American Division—Arts, Crafts & Hobbies
Scuba Diving	General Conference—Recreation
Scuba Diving, Advanced	General Conference—Recreation
Sculpturing	General Conference—Arts, Crafts & Hobbies
Seeds	General Conference—Nature
Seeds, Advanced	General Conference—Nature
Sheep Husbandry	General Conference—Outdoor Industries
Shells	General Conference—Nature
Shells, Advanced	General Conference—Nature
Shoe Repair	General Conference—Vocational
Shorthand	General Conference—Vocational
Shrubs	General Conference—Nature
Sign Language	General Conference—Outreach Ministries
Sign Language, Advanced	General Conference—Outreach Ministries
Silk Screen Printing	General Conference—Arts, Crafts & Hobbies
Silk Screen Printing, Advanced	General Conference—Arts, Crafts & Hobbies
Skateboarding (Not for North America)	South Pacific Division
Skiing, Cross-Country	North American Division—Recreation
Skiing, Downhill	General Conference—Recreation
Skin Diving	General Conference—Recreation
Slow-Pitch Softball	North American Division—Recreation
Small Engines	General Conference—Vocational
Small Fruit Growing	General Conference—Outdoor Industries
Small Mammal Pets	General Conference—Nature
Soap Craft	General Conference—Arts, Crafts & Hobbies
Soap Craft, Advanced	General Conference—Arts, Crafts & Hobbies
Soccer	North American Division—Recreation
Soils	North American Division—Nature
Spiders	General Conference—Nature
Springboard Diving	General Conference—Recreation
Stamps	General Conference—Arts, Crafts & Hobbies
Stamps, Advanced	General Conference—Arts, Crafts & Hobbies
Stars	General Conference—Nature
Stars, Advanced	General Conference—Nature
Stewardship	General Conference—Outreach Ministries
String Art	General Conference—Arts, Crafts & Hobbies

Subsistence Farming	South Pacific Div/Island Ed.
Swimming, Beginner's	General Conference—Recreation
Swimming, Beginner's Advanced	General Conference—Recreation
Swimming, Intermediate	General Conference—Recreation
Swimming	General Conference—Recreation
Swimming, Advanced	General Conference—Recreation
Tailoring	General Conference—Household Arts
Tapa Cloth	South Pacific Div/Island Ed.
Teaching	General Conference—Vocational
Temperance	General Conference—Outreach Ministries
Textile Painting	General Conference—Arts, Crafts & Hobbies
Thatching	East Africa Division
Tie-Dye	North American Division—Arts, Crafts & Hobbies
Track and Field	General Conference—Recreation
Travel	North American Division—Recreation
Travel, Advanced	North American Division—Recreation
Tree Climbing	South Pacific Div/Island Ed.
Trees	General Conference—Nature
Trees, Advanced	General Conference—Nature
Triathlon	South Pacific Division
Triathlon, Advanced	South Pacific Division
Tumbling and Balancing	General Conference—Recreation
Tumbling and Balancing, Advanced	General Conference—Recreation
Tutoring	North American Division—Outreach Ministries
Typewriting	General Conference—Vocational
Unicycle	North American Division—Recreation
Upholstery	South Pacific Division
Urban Development	North American Division—Outreach Ministries
Video	South Pacific Division
Wakeboarding	North American Division—Recreation
Water Skiing	General Conference—Recreation
Water Skiing, Advanced	General Conference—Recreation
Wattles	South Pacific Division
Weather	General Conference—Nature
Weather, Advanced	General Conference—Nature
Weaving	General Conference—Arts, Crafts & Hobbies
Welding	General Conference—Vocational
Whistles	North American Division—Arts, Crafts & Hobbies
Whistles, Advanced	North American Division—Arts, Crafts & Hobbies
Wilderness Leadership	General Conference—Recreation
Wilderness Leadership, Advanced	General Conference—Recreation
Wilderness Living	General Conference—Recreation
Windsurfing	General Conference—Recreation
Winter Camping	General Conference—Recreation
Wood Carving	General Conference—Arts, Crafts & Hobbies
Wood Handicraft	General Conference—Arts, Crafts & Hobbies
Woodworking	General Conference—Vocational
Worms	North American Division—Nature
Worms, Advanced	North American Division—Nature