#### Weather

## Do ONE of the following:

- a. Make one of the following instruments: wind vane, anemometer, rain gauge, hygrometer. Keep a daily weather log for one week using information from this instrument as well as from other sources such as local radio and television stations, NOAA Weather Radio, and Internet sources (with your parent's permission). Record the following information at the same time every day: wind direction and speed, temperature, precipitation, and types of clouds. Be sure to make a note of any morning dew or frost. In the log, also list the weather forecasts from radio or television at the same time each day and show how the weather really turned out.
- b. Visit a National Weather Service office or talk with a local radio or television weathercaster, private meteorologist, local agricultural extension service officer, or university meteorology instructor. Find out what type of weather is most dangerous or damaging to your community. Determine how severe weather and flood warnings reach the homes in your community.

## Do ONE of the following:

- a. Give a talk of at least five minutes to a group (such as your unit or a Cub Scout pack) explaining the outdoor safety rules in the event of lightning, flash floods, and tornadoes. Before your talk, share your outline with your counselor for approval.
- b. Read several articles about acid rain and give a prepared talk of at least five minutes to a group (such as your unit or a Cub Scout pack) about the articles. Before your talk, share your outline with your counselor for approval.

Find out about a weather-related career opportunity that interests you. Discuss with and explain to your counselor what training and education are required for such a position, and the responsibilities required of such a position.

#### Traffic Safety

Interview a traffic law enforcement officer in your community to identify what three traffic safety problems the officer is most concerned about. Discuss with your merit badge counselor possible ways to solve one of those problems.

- b. Using the Internet (with your parent's permission), visit five Web sites that cover safe driving for teenagers. As a group, discuss what you learn with your counselor and at least three other teenagers.
- c. Initiate and organize an activity or event to demonstrate the importance of traffic safety.
- d. Accompanied by an adult and a buddy, pick a safe place to observe traffic at a controlled intersection (traffic signal or stop sign) on three separate days and at three different times of the

day, for 30 minutes on each visit. At this intersection, survey (1) such violations as running a red light or stop sign; or (2) seat belt usage. Count the number of violations or number of drivers not wearing a seat belt. Record in general terms if the driver was young or old, male or female. Keep track of the total number of vehicles observed so that you can determine the percentage of compliance vs. violations. Discuss the findings with your merit badge counselor.

## Scouting heritage

Attend either a BSA national jamboree, OR world Scout jamboree, OR a national BSA high-adventure base. While there, keep a journal documenting your day-to-day experiences. Upon your return, report to your counselor what you did, saw, and learned. You may include photos, brochures, and other documents in your report.

- b. Write or visit the National Scouting Museum in Irving, Texas.\* Obtain information about this facility. Give a short report on what you think the role of this museum is in the Scouting program.
- •If you visit the BSA's national traveling tour, Adventure Base 100, in 2010, you may use this experience to fulfill requirement 4b. Visit www.adventurebase100.org (with your parent's permission) for the schedule and for more information.
- Learn about the history of your unit or Scouting in your area. Interview at least two people (one from the past and one from the present) associated with your troop. These individuals could be adult unit leaders, Scouts, troop committee members, or representatives of your troop's chartered organization. Find out when your unit was originally chartered. Create a report of your findings on the history of your troop, and present it to your patrol or troop or at a court of honor, and then add it to the troop's library. This presentation could be in the form of an oral/written report, an exhibit, a scrapbook, or a computer presentation such as a slide show.
- 6. Make a collection of some of your personal patches and other Scouting memorabilia. With their permission, you may include items borrowed from family members or friends who have been in Scouting in the past, or you may include photographs of these items. Show this collection to your counselor, and share what you have learned about items in the collection. (There is no requirement regarding how large or small this collection must be.)
- 7. Reproduce the equipment for an old-time Scouting game such as those played at Brownsea Island. You may find one on your own (with your counselor's approval), or pick one from the Scouting Heritage merit badge pamphlet. Teach and play the game with other Scouts.
- 8. Interview at least three people (different from those you interviewed for requirement 5) over the age of 40 who were Scouts. Find out about their Scouting experiences. Ask about the impact that Scouting has had on their lives. Share what you learned with your counselor.

## **Robotics**

- a. Attend a robotics competition and report to your counselor what you saw and learned about the competition and how teams are organized and managed.
- b. Learn about three youth robotics competitions. Tell your counselor about these, including the type of competition, time commitment, age of the participants, and how many teams are involved.

#### Music

### Do TWO of the following:

- a.Attend a live performance, or listen to three hours of recordings from any two of the following musical styles: blues, jazz, classical, country, bluegrass, ethnic, gospel, musical theater, opera. Describe the sound of the music and the instruments used. Identify the composers or songwriters, the performers, and the titles of the pieces you heard. If it was a live performance, describe the setting and the reaction of the audience. Discuss your thoughts about the music.
- b. Interview an adult member of your family about music. Find out what the most popular music was when he or she was your age. Find out what his or her favorite music is now, and listen to three favorite tunes with him or her. How do those favorites sound to you? Had you ever heard any of them? Play three of your favorite songs for your relative, and explain why you like these songs. Ask what he or she thinks of your favorite music.
- c. Serve for six months as a member of a school band, choir, or other local musical group; or perform as a soloist in public six times.
- d. List five people who are important in the history of American music and explain to your counselor why they continue to be influential. Include at least one composer, one performer, one innovator, and one person born more than 100 years ago.

## Do ONE of the following:

- a. Teach three songs to a group of people. Lead them in singing the songs, using proper hand motions.
- b. Compose and write the score for a piece of music of 12 measures or more, and play this music on an instrument.
- c. Make a traditional instrument and learn to play it.
- d. Catalog your own or your family's collection of 12 or more compact discs, tapes, records, or other recorded music. Show how to handle and store them.

#### LAW

- Do the following: Ask five people (not more than one from your immediate family) about the
  role of law enforcement officers in our society. Discuss their answers with them. Go to a law
  enforcement officer in your neighborhood and ask about his or her responsibilities and
  duties. Report your findings.
- 2. Do ONE of the following:

- a. Attend a session of a civil or criminal court. Write 250 words or more on what you saw.
- b. Plan and conduct a mock trial with your troop or school class. After the trial is over, discuss it with the group.

#### Journalism

#### Do either A OR B:

## a. Newspaper and magazine journalism

- 1. All on the same day, read a local newspaper, a national newspaper, a newsmagazine, and (with your parent's permission) an online news source. From each source, clip, read, and compare a story about the same event. Tell your counselor how long each story is and how fair and accurate the stories are in presenting different points of view. Tell how each source handled the story differently, depending on its purpose or audience
- 2. Visit a newspaper or magazine office Ask for a tour of the various divisions, (editorial, business, and printing). During your tour, talk to an executive from the business side about management's relations with reporters, editors, and photographers and what makes a "good" newspaper or magazine.

### b. Radio and television journalism

- 1. All on the same day, watch a local and national network newscast, listen to a radio newscast, and (with your parent's permission) view a national broadcast news source online. List the different news items and features presented, the different elements used, and the time in minutes and seconds and the online space devoted to each story Compare the story lists, and discuss whether the stories are fair and accurate. Explain why different news outlets treated the stories differently and/or presented a different point of view.
- 2. Visit a radio or television station. Ask for a tour of the various departments, concentrating on those related to news broadcasts During your tour, talk to the station manager or other station management executive about station operations, particularly how management and the news staff work together, and what makes a "good" station. If possible, go with a reporter to cover a news event.

#### Geocaching

Do ONE of the following:

- a. If a Cache to Eagle® series exists in your council, visit at least three of the 12 locations in the series. Describe the projects that each cache you visit highlights, and explain how the Cache to Eagle® program helps share our Scouting service with the public.
- b. Create a Scouting-related Travel Bug® that promotes one of the values of Scouting. "Release" your Travel Bug into a public geocache and, with your parent's permission, monitor its progress at www.geocaching.com for 30 days. Keep a log, and share this with your counselor at the end of the 30-day period.
- c. Set up and hide a public geocache, following the guidelines in the *Geocaching* merit badge pamphlet. Before doing so, share with your counselor a six-month maintenance plan for the geocache where you are personally responsible for the first three months. After setting up the geocache, with your parent's permission, follow the logs online for 30 days and share them with your counselor.
- d. Explain what Cache In Trash Out (CITO) means, and describe how you have practiced CITO at public geocaches or at a CITO event. Then, either create CITO containers to leave at public caches, or host a CITO event for your unit or for the public.
  - 9. Plan a geohunt for a youth group such as your troop or a neighboring pack, at school, or your place of worship. Choose a theme, set up a course with at least four waypoints, teach the players how to use a GPS unit, and play the game. Tell your counselor about your experience, and share the materials you used and developed for this event.

## Genealogy

#### DO the Following

- 1. With your parent's help, choose a relative or a family acquaintance you can interview in person, by telephone, or by e-mail or letter. Record the information you collect so you do not forget it.
- 2. Contact ONE of the following individuals or institutions. Ask what genealogical services, records, or activities this individual or institution provides, and report the results:
  - a. A genealogical or lineage society
  - b. A professional genealogist (someone who gets paid for doing genealogical research)
  - c. A surname organization, such as your family's organization
  - d. A genealogical education facility or institution.
  - e. A genealogical record repository of any type (courthouse, genealogical library, state or national archive, state library, etc.)

Conduct a home safety survey with the help of an adult. Then do the following:

- a. Draw a home fire-escape plan, create a home fire-drill schedule, and conduct a home fire drill.
- b. Test a smoke alarm and demonstrate regular maintenance of a smoke alarm.
- c. Explain what to do when you smell gas and when you smell smoke.
- d. Explain how you would report a fire alarm.
- e. Explain what fire safety equipment can be found in public buildings.
- f. Explain who should use fire extinguishers and when these devices can be used.
- g. Explain how to extinguish a grease pan fire.
- h. Explain what fire safety precautions you should take when you are in a public building.

# Do the following:

- a. Demonstrate lighting a match safely.
- b. Demonstrate the safe way to start a charcoal fire.
- c. Demonstrate how to safely light a candle. Discuss with your counselor how to safely use candles.

## Engineering

## Do ONE of the following:

- a. Use the systems engineering approach to make step-by-step plans for your next campout. List alternative ideas for such items as program schedule, campsites, transportation, and costs. Tell why you made the choices you did and what improvements were made.
- b. Make an original design for a piece of patrol equipment. Use the systems engineering approach to help you decide how it should work and look. Draw plans for it. Show the plans to your counselor, explain why you designed it the way you did, and explain how you would make it.

Electricity - 2, 11

Disabilities Awareness - 2, 4

Crime Prevention – 4a, 4b, 7

Art – 4

Animal Science – No confirmation on pre regs