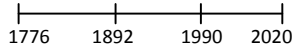


## Using A Timeline

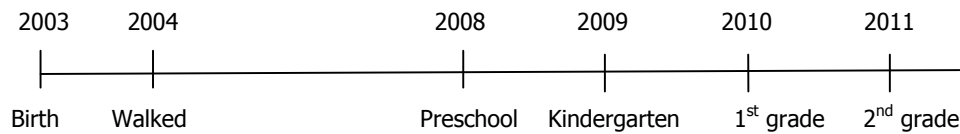


**Cross-Curricular Focus: History/Social Sciences**

A timeline is a tool that we can use to help us understand history. It can tell us what happened at different times, and how much time there was between two events. It can give us a picture of dates that helps us see how they all fit together.

Timelines aren't only for events from a very long time ago. People still use them to keep track of important dates in their lives. You can even make a timeline for yourself.

A timeline looks a lot like a number line when you begin. Draw a straight line across the page. Make little marks for the important events in your life. Your timeline might begin with your birth and include things like the first time you walked, and when you started school. It might show the year that you were in each grade. The year goes on one side of each mark, and the event on the other. Here is a sample timeline:



LEVEL: B.1

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE **5 QUESTIONS** OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- “**ZAP**” THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What is a timeline?

---

---

2) Why do people use timelines?

---

---

3) What kind of events should be on your timeline?

---

---

4) What is on a timeline besides the events?

---

---

5) Make a timeline that shows three events from your own life.

---

---

## Solids, Liquids, & Gases

Cross-Curricular Focus: Physical Science

Matter is the “stuff” that all the things on Earth are made of. It can exist in three different forms. These forms are **solid**, **liquid**, and **gas**. Matter looks and acts differently in each of its forms.

Matter in its solid form has a definite shape. It also takes up a definite amount of space. Under a microscope, its tiniest particles look squished together without very much room to move around. All they can do is vibrate, like a cell phone does when you turn off the ringer.

Matter in its liquid form takes up a definite amount of space, but does not have a definite shape. It takes on the shape of whatever container you pour it into. Under a microscope, a liquid’s tiniest particles slide past each other. They have room to move around, and that’s what lets them change their shape to match the container they are in.

Matter in its gas form does not take up a definite amount of space. It does not have a definite shape, either. Its tiniest particles have so much space in between them that they bounce around really fast!

LEVEL: B.2

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE 5 QUESTIONS OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- “ZAP” THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What are the three forms of matter?

---

---

---

2) Which form of matter has tiny particles that vibrate against each other, but do not have room to slide?

---

3) Which form of matter has the most space in between its particles?

---

4) Which form of matter has tiny particles that slide past each other?

---

5) What is matter? \_\_\_\_\_

---

# How Things Move

Cross-Curricular Focus: Physical Science



We can watch things around us move. When something is in **motion**, it **changes** its position. Objects can move from one place to another. They can move in many directions. If you roll a ball, it might move in a straight line, or it might move in a curve. A swing can move back and forth. A light switch can move up and down. Fans have blades that move in a circle.

If you want to know if something is moving, you can compare it to other things that are around it that are not moving. If the things behind the object are changing, the object is probably moving. If they are not changing, the object is probably not moving.

You can measure the motion of an object by measuring the distance between where it was when it started to move, and where it was when it stopped moving. Distance can be measured in inches, feet, yards, or miles in the customary system of measurement. It can be measured in millimeters, centimeters, meters, and kilometers in the metric system of measurement.

LEVEL: B.3

DATE:

NAME:

PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)

READ THE 5 QUESTIONS OUT LOUD

READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_

"ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)

ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) When something is in motion, what does it change?

\_\_\_\_\_

2) How does a swing move?

\_\_\_\_\_

3) How does a light switch move?

\_\_\_\_\_

4) How can you test if something is moving or not?

\_\_\_\_\_

\_\_\_\_\_

5) What is one unit of measurement you could use to measure distance?

\_\_\_\_\_

## Using Land in Different Ways

Cross-Curricular Focus: History/Social Sciences

People use land in different ways. Some areas have a lot of open space, and some areas have buildings and people packed in very close to each other. People choose the type of community they want to live in based on their interests and their work.

A **rural** area has few homes and businesses, with lots of space in between. Rural areas are perfect for people and businesses who want to grow plants for food, or raise animals. Most states have some rural areas.

An **urban** area is a large city and the places near it. Many people live and work in the same large city. Every state has urban areas. You will find modern art and modern building designs in urban areas. There are often many things to do and see in the city.

A **suburban** area is located outside a big city, but not too far away. Suburban communities let people live near where they work, without the crowds that are in the city. You will find apartments, houses, and shopping centers in suburban communities.

LEVEL: B.4

DATE:

NAME:

PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)

READ THE 5 QUESTIONS OUT LOUD

READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_

“ZAP” THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)

ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What is a rural area like? \_\_\_\_\_

\_\_\_\_\_

2) What is an urban area like? \_\_\_\_\_

\_\_\_\_\_

3) What is a suburban area like? \_\_\_\_\_

\_\_\_\_\_

4) Why do you think most farms are in rural areas? \_\_\_\_\_

\_\_\_\_\_

5) Do you like rural, urban, or suburban areas best? Why? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## What is Gravity?

Cross-Curricular Focus: Physical Science



You may have seen astronauts floating around in space or in a space shuttle. Have you ever wondered why they float and your feet stay firmly on the ground? When you drop something, why does it fall? The answer to both of these questions is something called **gravity**. It **affects** everything we do.

Many years ago, a man named Sir Isaac Newton wondered about gravity, too. He watched and tested the way things move and fall on Earth, and wrote his ideas down. Scientists today use a lot of his ideas, which are now considered laws of science.

Gravity is a force that makes all objects be attracted to each other. The bigger the object is, the more it attracts things. Since nothing on Earth is bigger than planet Earth itself, all the things (and people) on Earth are attracted by Earth. Everything is pulled toward the center of the planet, which is why things fall to the ground. It is also why people and things stay on the ground instead of floating around. Earth is even large enough to attract our moon. That's why we can always see it in our sky!

LEVEL: B.5

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE **5 QUESTIONS** OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- "ZAP"** THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) Why do your feet stay on the ground instead of floating? \_\_\_\_\_  
\_\_\_\_\_

2) Who was the scientist who did experiments with gravity and motion many years ago? \_\_\_\_\_  
\_\_\_\_\_

3) Why are things and people attracted to Earth? \_\_\_\_\_  
\_\_\_\_\_

4) What can we see in the sky because of gravity? \_\_\_\_\_  
\_\_\_\_\_

5) What would it be like if there were no gravity on Earth? \_\_\_\_\_  
\_\_\_\_\_

## Color Shows Mood

Cross-Curricular Focus: Visual Arts

Artists use **color** to create patterns and show different moods. Bright colors make us feel happy and energetic. Dark colors make us feel calm or sad. Bright colors are easier to see in a painting or picture, while darker colors blend in or hide.

The primary colors are red, yellow, and blue. They are the colors that can be mixed together in different combinations to make different colors. Mixing two primary colors makes a secondary color. The secondary colors are orange, green, and violet (purple). Orange is made by mixing yellow and red. Green is made by mixing yellow and blue. Violet is made by mixing red and blue. Intermediate colors, like red-orange can be made by mixing a primary and a secondary color together. Black, white, and gray are special colors called neutral colors.

Colors have been organized into a color wheel. It shows the three primary colors, the three secondary colors, and the six intermediate colors. Using the color wheel helps some artists know which colors they want to use together in their artwork.

LEVEL: B.6

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE 5 QUESTIONS OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- “ZAP” THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What kinds of colors make us feel calm? \_\_\_\_\_  
\_\_\_\_\_

2) What kinds of colors make us feel like we have lots of energy? \_\_\_\_\_  
\_\_\_\_\_

3) What are the primary colors? \_\_\_\_\_  
\_\_\_\_\_

4) What are the secondary colors? \_\_\_\_\_  
\_\_\_\_\_

5) What tool do artist use to organize all the colors? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Limited Resources

Cross-Curricular Focus: History/Social Sciences

Natural **resources** are things that we use that come from Earth. Our natural resources are **limited**. This means that they will not last forever. Some are renewable, like when you plant a new tree when you cut one down. Others are not renewable, like when you dig coal out of the ground. Once it is used, it is gone.

People are aware of the fact that Earth's natural resources are limited, and can do things to **help** conserve those resources. When you try to conserve a natural resource, you try to use less of it so it does not get used up so fast. One way that people conserve fuel, like gasoline, is by riding a bicycle or walking when the distance is short instead of driving everywhere.

Water is a very important natural resource because we all need it to stay alive. We can conserve water by making sure that our pipes and faucets do not leak. We can also conserve water by making smart choices, like only using the dishwasher or washing machine when they are full.

LEVEL: B.7

DATE:

NAME:

PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)

READ THE 5 QUESTIONS OUT LOUD

READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_

"ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)

ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What is a natural resource? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2) What is a renewable resource? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

3) What does it mean to conserve a resource? \_\_\_\_\_  
\_\_\_\_\_

4) Why is water such an important natural resource? \_\_\_\_\_  
\_\_\_\_\_

5) Give an example of something you will try to do to save a natural resource. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## The Scientific Method

Cross-Curricular Focus: Science Investigations

The scientific method is the way that scientists organize and keep track of their studies as they learn and **experiment**. The scientific method is all about asking **questions** and trying to find out the answers. You start with a question about something that interests you, or something you notice about the world. Then you **observe** and read about that topic as much as you can, organizing your observations and taking notes.

After you have made a lot of observations, it is time to set up an experiment and make a smart **guess**, or **prediction**, about what you think will happen. You make your guess by using all the information you have, and your knowledge and common sense. Scientists call this a hypothesis.

Experiments should be done more than once so you know what the usual result will be. It is important to take good notes. By the time you finish, you will either prove that your guess was right, or you will prove that your guess was wrong. Either result is okay because you are learning how things work!

LEVEL: B.8

DATE:

NAME:

PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)

READ THE 5 QUESTIONS OUT LOUD

READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_

"ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)

ANSWER EACH QUESTION WITH A COMPLETE SENTENCE

1) What system do scientist use to keep track of their studies? \_\_\_\_\_  
\_\_\_\_\_

2) What should you start with if you are going to use this system? \_\_\_\_\_  
\_\_\_\_\_

3) Should you experiment first, or make observations first? \_\_\_\_\_  
\_\_\_\_\_

4) What do scientists call a smart guess?  
\_\_\_\_\_  
\_\_\_\_\_

5) Why should you do all experiments at least two or three times? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## Push and Pull

Cross-Curricular Focus: Physical Science

When an object is not moving, it is at rest. It will stay that way unless something makes it move. The power that makes other things move is called a force. A force can be a **push** or a **pull**. It changes the object's position.

When a force makes an object move away from you, it is called a push. When a force makes an object move toward you, it is called a pull. You can use pushes and pulls to move objects that you need to move.

When a soccer player sees the ball coming towards him, he can use a push to make it go where he wants it to go. In this case, the push is a kick. When a little girl wants to give her stuffed animals a ride in her little red wagon, she uses a pull to make the wagon move along after her.

Every push and pull takes energy. The amount of energy and **strength** you need to move an object depends on how big the object is. Large objects need a large force to move them. Small objects only need a small force to move them.

LEVEL: B.9

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE 5 QUESTIONS OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- "ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) When an object is at rest, how will it begin to move? \_\_\_\_\_  
\_\_\_\_\_

2) What are the two kinds of force called? \_\_\_\_\_  
\_\_\_\_\_

3) What is it called when a force makes an object move toward you?  
\_\_\_\_\_

4) What is it called when a force makes an object move away from you?  
\_\_\_\_\_

5) How does an object's size make a difference in push or pull?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Cause & Effect

Cross-Curricular Focus: Reasoning Skills

Cause and effect is one way to explain the things that happen all around us. Many things happen because something else **caused** or **influenced** them to happen. Sometimes it is hard for students to look at a cause and figure out the effect. It may help you to start with the effect and use your reasoning skills. Think about all the things you know that could be reasons for the effect you can see.

For example: You may see someone putting on a big heavy jacket. Think to yourself, "What would make someone put on a heavy jacket?" Maybe the person is going outside into very cold weather. Maybe the person works in the penguin pen at Sea World. Maybe the person is going to visit an ice skating rink where the air is kept very cold. All of these things could be a cause for the effect: putting on a heavy jacket.

Think about another example: the effect is that the student had to go to the principal's office. What are the possible causes? Maybe the student bullied another student. Maybe the student is just being picked up early. Maybe the student is being given a prize!

LEVEL: B.10

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE 5 QUESTIONS OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- "ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A COMPLETE SENTENCE

The effect is: your clothes are wet.

Write two possible causes:

1. \_\_\_\_\_

2. \_\_\_\_\_

The effect is: you got an A+ on your spelling test! Write two possible causes:

3. \_\_\_\_\_

4. \_\_\_\_\_

5. In your own words, explain something you learned about cause and effect.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Plant Life Cycles

Cross-Curricular Focus: Life Science

Every living thing goes through **changes**. Living things grow through different stages, until they reach the end of their life cycles, and die. There are many kinds of plants, and each kind has its own **life cycle**. Lots of plants start their life cycle as a seed. The seed needs certain things or it will not grow into a plant.

Sometimes seeds wait in the ground until they can get the things they need. When they get enough warmth from the sun, and enough water, a tiny little sprout will push out of the seed and stretch up until it pokes through the dirt and into the air.

As the little plant continues to get sunshine and water, the stem grows taller and leaves unfold. More leaves and stems grow on the main stem. The adult plant grows flowers. The flowers of many plants make fruit. The fruit has seeds inside it so more new plants can grow.

New plants look like their parent plants. Seeds from a plant will grow the same kind of plant. When a seed begins to grow, it is the beginning of another plant life cycle.

LEVEL: B.11

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE 5 QUESTIONS OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- "ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A COMPLETE SENTENCE

1) What is the process of living, growing, changing, and dying called?

\_\_\_\_\_

2) How do many plants begin?

\_\_\_\_\_

\_\_\_\_\_

3) What two things does a seed need to have with it in the ground to be able to grow? \_\_\_\_\_

\_\_\_\_\_

4) Where can you usually find seeds in a adult plant? \_\_\_\_\_

\_\_\_\_\_

5) What kind of plant will a seed grow into? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Food is Our Fuel

Cross-Curricular Focus: Life Science

Everything that is alive needs energy. All animals, including people, get the energy they need from **food**. If you think about the human body as an amazing machine that can do all kinds of wonderful things for us, think of food as the **fuel** that helps keep it running.

Plants use sunlight to make their own food. Animals are not able to do that. Some animals eat plants. Some animals eat other animals. Some animals, like people, eat both plants and animals.

Since plants make their own food using sunlight, the sun's energy is found in plants. When we eat plants, like fruits and vegetables, we get more of the sun's energy than when we eat animals. Energy is very strong in the sun. It loses a lot of its strength by the time it goes into a plant. By the time an animal eats a plant, the energy is even less strong. The animal has also used energy to find the plant to eat. When a second animal eats the first animal, it gets even less energy than the first animal got. The second animal has had to find and chase down the first animal, and so it has also used up a lot of energy to get more.

LEVEL: B.12

DATE:

NAME:

PREVIEW THE PASSAGE (title, bold words, pictures, etc.)

READ THE 5 QUESTIONS OUT LOUD

READ THE PASSAGE **OUT LOUD** TO SOMEONE (daily): \_\_\_\_\_

"ZAP" THE ANSWERS WITH THE QUESTIONS (with marker/highlighter)

ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) Where do all animals get their energy? \_\_\_\_\_  
\_\_\_\_\_

2) Where do plants get their energy?  
\_\_\_\_\_  
\_\_\_\_\_

3) If our bodies are amazing machines, then food is our \_\_\_\_\_

4) Why do we get more energy from eating vegetables than we get from eating meat? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5) If a third animal eats the second animal, will it get more or less energy?  
\_\_\_\_\_  
\_\_\_\_\_

## Many Ways to Measure

Cross-Curricular Focus: Mathematics

There are many different ways to measure, and many different tools to help us do it. When you measure **height**, you are measuring how tall someone or something is. You start at the bottom, or where the person's feet touch the floor, and stop at the tallest point, or the top of the person's head. A tape measure or a yard stick are the best tools for measuring height.

When you measure **weight**, you are measuring how heavy someone or something is. There are many kinds of scales you can use to weigh objects or people. You may have a scale with a dial or digital numbers in your bathroom for weighing yourself. A scale like that can also be used to weigh objects, but a spring scale or a balance work better for measuring things that don't weigh very much.

When you measure **temperature**, you are measuring how hot or cold something is. The best tool to use for measuring temperature is a thermometer. There are many kinds of thermometers for measuring temperatures in different places, inside and outside.

LEVEL: B.13

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE 5 QUESTIONS OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- "ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What do you call the measurement that tells how heavy someone or something is? \_\_\_\_\_

2) What do you call the measurement that tells how hot or cold something is?  
\_\_\_\_\_

3) What do you call the measurement that tells how tall someone or something is? \_\_\_\_\_

4) What is one tool that can be used to measure weight? \_\_\_\_\_  
\_\_\_\_\_

5) What is one tool that can be used to measure temperature? \_\_\_\_\_  
\_\_\_\_\_

## The Pitch and Volume of Sound

Cross-Curricular Focus: Physical Science



Sound can be measured by how low or high it is. This measurement is called its **pitch**. An object or instrument that vibrates very slowly makes a sound with a low pitch. An object or instrument that vibrates very quickly makes a sound with a high pitch.

Have you ever noticed the different instruments that play in an orchestra? The bigger an instrument is, the lower the sound that it makes. A tiny piccolo flute has a very high pitch, while a full-size flute has a much lower pitch. A violin's pitch is higher than a viola or bass. A trumpet's pitch is higher than a tuba's. Sound travels in waves. The vibrations from the instruments reach your ear, and you hear them as sound.

**Volume** is different than pitch. You can use more or less volume to make a sound, like music or your voice, louder or softer. Volume and pitch work together to make sounds sound the way that they do. Next time you hear an instrument play, listen to the radio, or even just listen to someone's voice as they talk or sing, see if you can hear the difference between the volume and the pitch.

LEVEL: B.14

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE 5 QUESTIONS OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- "ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What is the measurement of how low or high a sound is called?

---

2) What is the measurement of how loud or soft a sound is called?

---

3) How does sound travel?

---

4) What pitch would the sound from a large instrument have?

---

5) What pitch would the sound from a small instrument have?

---

# The Rock Cycle

Cross-Curricular Focus: Earth Science

If you stand outside and look around you, you will see land. Land is made out of **rocks** and soil. A lot of the rocks are down under the soil. Rocks are solid things made out of one or more **minerals**. Minerals are tiny solids found in nature that have never been alive.

The rock cycle describes how rocks are formed, how they **break** apart, and how they are reformed into other kinds of rocks. When water, wind, chemicals, or growing plants cause rocks to break into smaller pieces, it is called **weathering**. Water causes most of the weathering of rocks. Many rocks have small cracks that can let in water. The cracks get bigger if the water freezes and then melts again, especially if it keeps on happening. The cracks finally get so big that the rock breaks into smaller pieces.

Layering is one way new rocks form. Tiny bits of rock and soil build up in layers over long periods of time. The more layers there are, the heavier they are. The top layers push down on the lower layers, and the bits of rock and soil cement together.

LEVEL: B.15

DATE:

NAME:

PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)

READ THE **5 QUESTIONS** OUT LOUD

READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_

**“ZAP”** THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)

ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What is land made out of? \_\_\_\_\_  
\_\_\_\_\_

2) What is rock made out of? \_\_\_\_\_  
\_\_\_\_\_

3) What does the rock cycle describe for us? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4) What is weathering? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5) How does water break a rock? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Microscopes Magnify Things

Cross-Curricular Focus: Science Investigations

Microscopes are tools that scientists (even student scientists like you) use to make observations about things that are too tiny to see with just their eyes. Microscopes **magnify** things. They make them look bigger than they really are. Many things in **science** can be studied under a microscope. If the scientists **record** their **data**, other scientists can learn, too.

Scientists have had light microscopes to use since the late 1500's. Robert Hooke and Anton Van Leeuwenhoek were two of the microscope's early inventors. Thanks to them, and the scientists that came after them, we know a lot about microscopes and how they work. Today's light microscopes work better than Hooke and Leeuwenhoek's microscopes. Some can magnify things 1,000 times!

A light microscope uses two glass lenses inside a short tube. A light bulb under the object being viewed helps make sure that the object can be seen clearly. Little knobs like wheels can be turned to make the view sharp and clear. You see a whole new world under a microscope. You just have to look!

LEVEL: B.16

DATE:

NAME:

PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)

READ THE 5 QUESTIONS OUT LOUD

READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_

"ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)

ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What does a microscope do?

---

---

2) Who were two of the men who helped invent the microscope many years ago? \_\_\_\_\_

---

3) How do scientists let other scientists know about the things they observe so they can learn, too? \_\_\_\_\_

---

4) What is inside the microscope's short tube? \_\_\_\_\_

---

5) What are the little knobs on the side of a microscope used for? \_\_\_\_\_

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## Fractions as Parts of a Whole

Cross-Curricular Focus: Mathematics



When you cut a **whole** thing into equal **parts** so that everyone can have a **fair share**, each of those parts is called a **fraction**. Fractions have special names that tell us how many pieces of that size would be needed to make the entire whole. The man in the drawing above looks like he is cutting up a pie for a giant! He is being careful to make equal parts. When he finishes cutting, he will have eight slices that are all the same size. Each slice is called one *eighth* because a single slice is one out of the eight pieces needed to make the whole pie.

Because none of the pieces are gone yet, no matter how many pieces the pie is cut into, it is still a whole. The more pieces that are cut, the smaller the pieces have to be. If the pie is cut into only three pieces, the pieces will be pretty big. Each of the pieces will be called one third. If the pie is cut into five pieces, the pieces have to be a little smaller so you can get two more slices out of the pie. Each piece is called one fifth. No matter how many pieces are cut, if you have them all, you have one whole.

LEVEL: B.17

DATE:

NAME:

PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)

READ THE 5 QUESTIONS OUT LOUD

READ THE PASSAGE OUT LOUD TO SOMEONE (*daily*): \_\_\_\_\_

"ZAP" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)

ANSWER EACH QUESTION WITH A COMPLETE SENTENCE

1) What is a fraction? \_\_\_\_\_  
\_\_\_\_\_

2) How does a fraction get its special name? \_\_\_\_\_  
\_\_\_\_\_

3) What do you have if you have all the pieces that the whole was cut into?  
\_\_\_\_\_

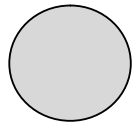
4) What happens to the size of the pieces when you have to cut more pieces? \_\_\_\_\_  
\_\_\_\_\_

5) If the whole is cut into four pieces, what is the special name for each of the pieces? \_\_\_\_\_

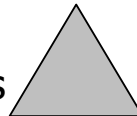
# Shapes on a Plane

Cross-Curricular Focus: Mathematics

In math, a **plane** does not fly through the air carrying people from one place to another. A plane is a flat area that is home to many different kinds of geometric shapes. Let's take a look at some of the most common geometric shapes.



At first, the **circle** does not look like it belongs with the other shapes. They all have straight edges and sharp corners. A circle has curves. But the angles you find inside the corners of the other shapes are all measured by how much of a circle they are. So, a circle does belong.



A **triangle** has three sides. It also has three angles and three vertices (corners). There are different kinds of triangles, depending on the lengths of their sides and the size of their angles.



A **rectangle** has four sides and four right angles. Right angles make the corners perfectly square. If all the sides of the rectangle are the same length, it is a special kind of rectangle.

You may know it by its other, much more common name, a square.



LEVEL: B.18

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE **5 QUESTIONS** OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- "**ZAP**" THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) Geometric shapes live in a flat world.

What is it called? \_\_\_\_\_  
\_\_\_\_\_

2) How is a circle different from the other geometric shapes? \_\_\_\_\_  
\_\_\_\_\_

3) What is the difference between a rectangle and a square? \_\_\_\_\_  
\_\_\_\_\_

4) How many angles does a triangle have? \_\_\_\_\_

5) What are vertices? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Revise Your Writing

Cross-Curricular Focus: Writing Strategies

When your teacher says that it is time for writing, do you get happy, or worried? Many children love to tell stories out loud, but have a hard time getting them down on paper. Writing is one of those skills that takes practice.

Even professional writers do not write everything perfectly the first time. They have to **revise** their work. When you revise your writing, you look for ways to change it that will make it better. You check your spelling, and you make sure that you have used capitals, periods, and other punctuation marks in the best way. You look for words that can be taken out or traded for different, more exciting words. You make sure that your words help the reader get a picture in his mind when he reads them.

Revising your writing is important. The changes that you make can turn boring words into exciting words, and can make your ideas come alive. Revising your writing is cleaning it up to make it ready for your readers to enjoy.

LEVEL: B.19

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE **5 QUESTIONS** OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- “**ZAP**” THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What does it mean to revise your writing? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2) Do professional writers have to revise their writing? \_\_\_\_\_  
\_\_\_\_\_

What are three things you can check or change when you revise your writing?

3) \_\_\_\_\_  
\_\_\_\_\_

4) \_\_\_\_\_  
\_\_\_\_\_

5) \_\_\_\_\_  
\_\_\_\_\_

## Listening, Speaking, Reading, Writing

Cross-Curricular Focus: Thinking Skills

Did you know that to really get good at using the English language you have to practice listening, speaking, reading, and writing? Even if English is the only language you speak, you are still learning to speak it and use it well every day. Most students know that they have to practice reading and writing. Those are both taught in school, and your teacher tells you when you need to do them.

You might think you are really good at talking, but the truth is, you need to practice how to say things in a way that helps people understand what you mean. Think about what you will say before you speak out loud in class, and when you share in front of the class, make sure you use a nice, loud, voice so that everyone can hear you.

Some people are better at listening than others, but everyone can use some practice. When someone is speaking, give the person your full attention. Turn and look at him/her. Focus on what the speaker is saying, and not on what you plan to say next.

LEVEL: B.20

DATE:

NAME:

- PREVIEW THE PASSAGE (*title, bold words, pictures, etc.*)
- READ THE **5 QUESTIONS** OUT LOUD
- READ THE PASSAGE **OUT LOUD** TO SOMEONE (*daily*): \_\_\_\_\_
- “ZAP” THE ANSWERS WITH THE QUESTIONS (*with marker/highlighter*)
- ANSWER EACH QUESTION WITH A **COMPLETE SENTENCE**

1) What four things do you need to practice to get really good at using English? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

2) Which of those things do you practice the most at school?  
\_\_\_\_\_  
\_\_\_\_\_

3) What is one thing you can do to practice speaking? \_\_\_\_\_  
\_\_\_\_\_

4) What is one thing you can do to practice listening? \_\_\_\_\_  
\_\_\_\_\_

5) Which do you need to practice more, listening, or speaking? \_\_\_\_\_  
\_\_\_\_\_