



Grade 2

At Home Learning - Week 2

The learning this week will focus on a cross-curriculum approach in Reading/Writing, Mathematics and Science. The student is expected to demonstrate that things can be done to materials such as cutting, folding, sanding, and melting to change their physical properties; AND combine materials that when put together can do things that they cannot do by themselves such as building a tower or bridge and justify the selection of those materials based on their physical properties.

The learning focus for Social Studies will be a review of natural resources and mapping skills. Students will use those skills learned in Reading/Writing, Mathematics, and Science to complete these activities.

It is recommended that each day students spend 20 minutes reading independently, spend 30 minutes on the cross-curricular materials (Science, Math, Reading/Writing) and spend 15 minutes on the Social Studies materials. Materials provided by district resources: STEMscopes and Studies Weekly.

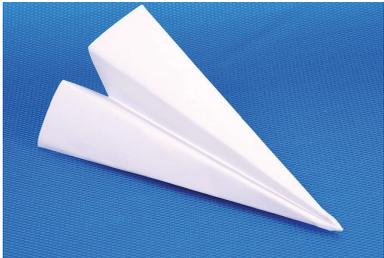
Reflect

Things often change. However, the materials they are made of might not change. We often make something new without creating a new material. These changes are called physical changes.

An iceberg was once many snowflakes. Snowflakes were once water. These things seem very different, but they are all made of water. A toothpick and a tree also seem different. Still, they are both made of wood.

Can you think of how things can change? What are some physical changes you have made to things?

Things can change in many ways. Here are some ways we change things.



Folding changes a flat piece of paper into an airplane.



Melting changes ice cubes into liquid water.



Cutting changes a tree into boards and sawdust.

How would you make these changes? Answer with these words:

- Sand
- Cut
- Freeze



To share a pie with friends:



To change fruit juice into an ice pop:



To smooth a piece of wood:

Look Out!



Everyday Life: Origami

Look at this picture. Can you see how the paper has been folded to make a swan? Folding paper to make shapes like animals is called origami.

Origami began in Japan, but people all over the world do it. You can find books at the library that show you how.

Different materials are used for different things. How do you choose which material to use for a project? Think about the material's properties. Ask yourself questions like these:

- Do you need something hard?
- Do you need something you can cut?
- Do you need flexible materials? Something that is *flexible* can bend.
- Do you need materials you can burn?

property: how something looks, feels, sounds, smells, or tastes



Wood is good for building. It is sturdy yet easy to cut.



Glass is good for windows. You can see through it.



Plastic is a useful material. We can bend it into many shapes.



Metal is good for pots. It doesn't burn or melt easily.

What Do You Think?

Materials are often combined. Some things are made of more than one material. Many things wouldn't work very well if they were made of only one material.



Would you want a bicycle made only of metal?



Could a swing be made only of wood?

Some things would not work if they had missing parts. Shovels, hammers, and fly swatters would be useless without handles.

What Do You Know?

Cars are made of several different materials. Look at the picture of a car. Draw a line from the name of each material to a part of the car that is made of that material. (Different parts may contain the same material.)



Materials:

- Metal
- Glass
- Rubber

What is it made of?

Choose a household item to disassemble and reassemble with your child. Your choice will depend on your available tools and your mechanical and technical abilities. The object you take apart could be as simple as a flashlight or a mechanical pencil or as complicated as a power tool or a small appliance.

A flashlight can serve as an example. Follow this procedure as you take it apart with your child:

1. Discuss each piece as you remove it from the flashlight. Ask your child to identify the material it is made of and to guess why that material was chosen. For example, the casing is likely plastic because it is sturdy yet inexpensive; the wires are copper because copper conducts electricity.
2. Stress the importance of arranging the parts in the order in which you removed them. This will help you to remember the order for reassembly.
3. Show how the different parts work together, and explain how removing a part would keep the flashlight from working properly.
4. Let your child try to reassemble the flashlight.

Here are some questions to discuss with your child:

1. What material(s) is each part made of? (A flashlight will include wires, a light bulb, a lens, a reflector, and an exterior casing.)
2. For each part, why was that material chosen?
3. For each part, would another material have worked as well?



Linking Literacy

Name: _____ Date: _____

Categorize Words

Look at the descriptions below. Write each description in the category it belongs. Each word should be used one time.

cutting an apple	dust gathering on a vase	melting ice
burning a piece of paper	folding a piece of paper	shining light on plastic
sanding a piece of wood	touching a blanket with your fingers	freezing juice into a popsicle

Physical Change	Not a Physical Change



Math Connections

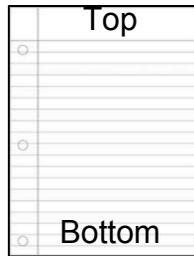
Name: _____ Date: _____

You can change the physical properties of an object by bending, cutting, folding, sanding, or melting it.

Let's Fold!

Materials:

1 sheet of notebook paper



Data Table:

Use the table below to record the answers to the questions on the next page.

Step	Number of pieces	Name of pieces	Fraction
1	2		
2		fourths	
3			$\frac{1}{8}$



Math Connections

Procedure:

1. Fold the paper in half from top to bottom. Record your answers to the following questions on the chart on page 1.
 - How many pieces did it make?
 - What are the pieces called?
 - How do we write this as a fraction?
 - Label each piece with its correct fraction name.
2. With the paper folded in half, fold it in half again.
 - How many pieces did it make?
 - What are the pieces called?
 - How do we write this as a fraction?
 - Label each piece with its correct fraction name.
3. With the paper folded in quarters, fold it in half again.
 - How many pieces did it make?
 - What are the pieces called?
 - How do we write this as a fraction?
 - Label each piece with its correct fraction name.
4. Which pieces were smaller? Circle one: Fourths or Halves
5. Which pieces were larger? Circle one: Eighths or Fourths



Open-Ended Response

Name: _____

Date: _____

Short Answer

- 1 Imagine you make a paper airplane. Describe how the paper is different after making your paper airplane.



- 2 Think of a piece of wood. Write a sentence about how you could change its shape.



Open-Ended Response

Write it!

Write a story about building a bridge.
What materials will you use?



REVIEW
WEEKS 8-13

Texas

SHOW WHAT YOU KNOW

WEEK 14

Studies Weekly™

GRADE

2

The first people to live in North America were American Indians. Find where the **Cheyenne**, **Hopi**, **Iroquois**, **Seminole** and **Tlingit** lived.

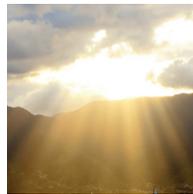
Let's Review...

- Natural Resources
- Celebrations
- Maps • Communities

Let's Review...

SHOW WHAT YOU KNOW

A natural resource is any material from the Earth that people can use. We need natural resources for many things. Look at the pictures below. Circle the pictures that show natural resources.



Use the coordinates on this map to find the location of the cities.



Sacramento, California _____

Austin, Texas _____

Santa Fe, New Mexico _____

Raleigh, North Carolina _____

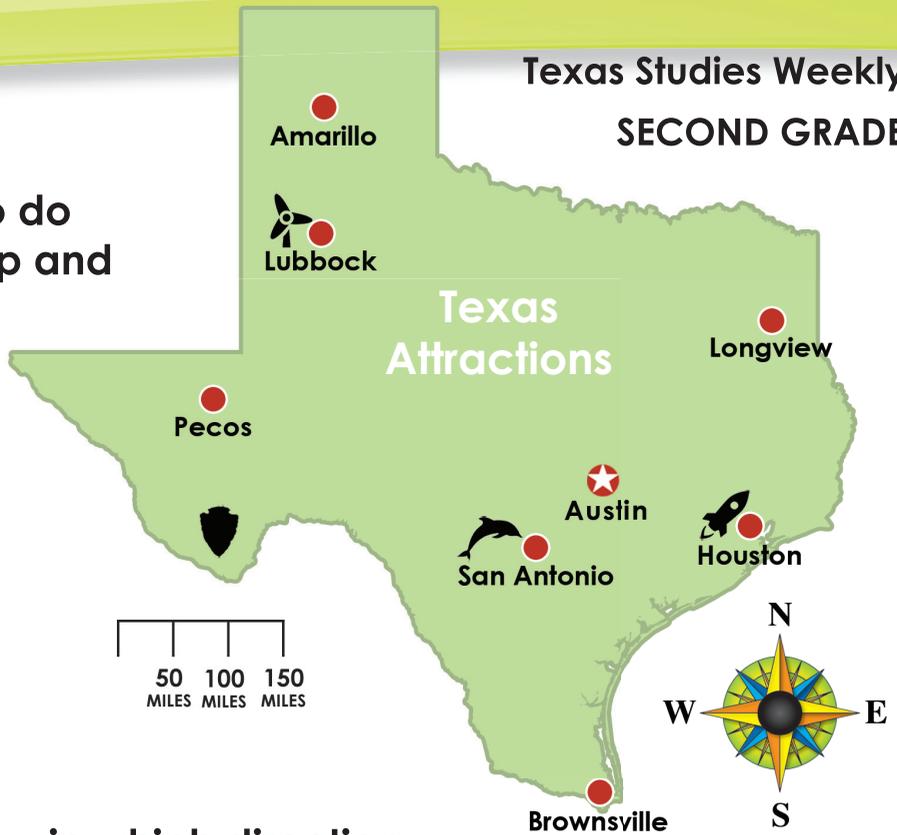
Lincoln, Nebraska _____

Washington, D.C. _____

There are many things to do in Texas. Look at the map and answer the questions.

Map Key

-  SeaWorld
-  NASA Space Center
-  Big Bend National Park
-  Wind Power Museum



1. If you lived in Longview, in which direction would you travel to get to NASA Space Center? _____
2. Your family wants to see ocean animals. Where would you visit? _____
3. How many miles is it from Pecos to Big Bend National Park? _____

An explorer is a person who travels to places where no one has ever been. Solve each riddle below. Use the word bank for help.

Word Bank

- Christopher Columbus
- Cabeza de Vaca
- Lewis and Clark

1. We traveled from St. Louis to the Pacific Ocean and back. Sacagawea helped us. Who are we? _____
2. I meant to travel to the East Indies. Instead, I landed at a place I called the New World. Who am I? _____
3. I sailed on a raft from the coast of Florida and landed near Galveston Island. Who am I? _____

Name _____

Write a title for the map. (Hint: What does the map show?) Color Texas your favorite color. Draw a yellow star to show the capital of Texas. Draw a green star to show where Washington, D.C. is. Color the coast of Texas blue. You can use the map inside to help you.



Circle the names of the places that are part of North America. Write an X on the names of places that are not part of North America.

England

The United States

Caribbean Islands

Mexico

China

Africa

Spain

Japan

Canada

Write the names of Earth's oceans in ABC order on the lines.

Southern
Arctic
Pacific
Atlantic
Indian

