Scope Phenomenon

Name: _____ Date: _____

Where in the World

1. What do you notice about the map in the video?

_____
_____
_____
_____

2. What kind of map is the one in the video? How can you tell?

_____
_____
_____
_____

3. If the Earth is round, why do we use flat maps to help us find landforms and bodies of water?

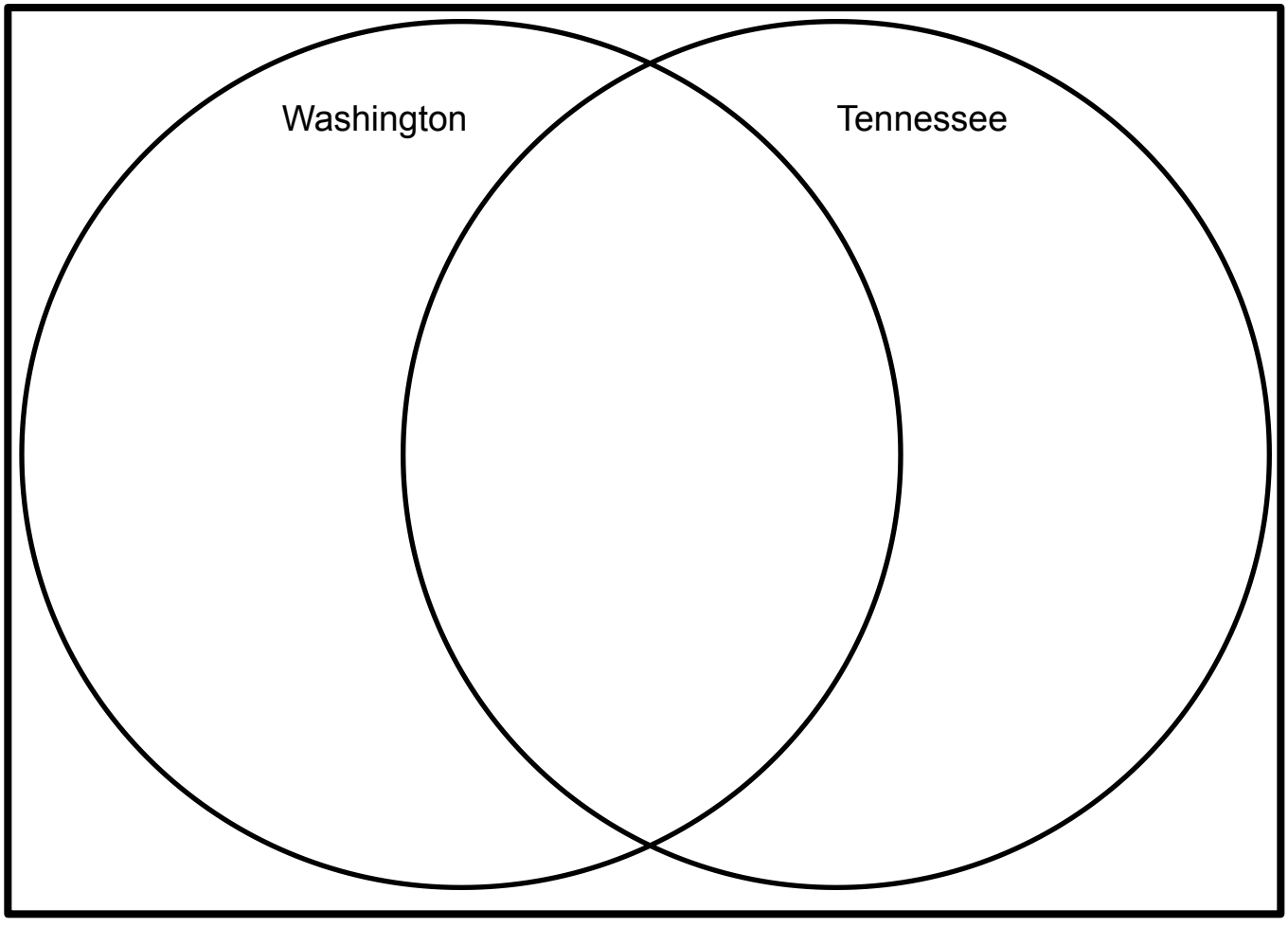
_____
_____
_____
_____
_____
_____
_____
_____

Explore

Name: _____ Date: _____

Washington vs. Tennessee

Look at the map of Washington and Tennessee and fill in the venn diagram.



1. How are the maps different?

_____

_____

2. How are the maps alike?

_____

_____

Explore

Reference Map
Tennessee State

Compare the Washington State Map to the Tennessee State Map. Answer the questions.

Explore

Reference Map
Washington State

Compare the Washington State Map to the Tennessee State Map. Answer the questions.

Explore

Name: _____ Date: _____

Washington vs. Tennessee

Claim-Evidence-Reasoning

Think like a scientist and write a scientific explanation that describes how maps teach us about an area.

Claim

_____

_____

_____

Evidence

_____

_____

_____

_____

_____

	2	1	0
Claim	Answers the question and is accurately based on data.	Answers the question, but answer is inaccurately based on data.	Makes no claim, or does not answer the question.
Evidence	Cites at least two valid pieces of evidence based on data.	Cites inaccurate data from data table.	Cites changes, but does not use data from data table.

Explore

Name: _____ Date: _____

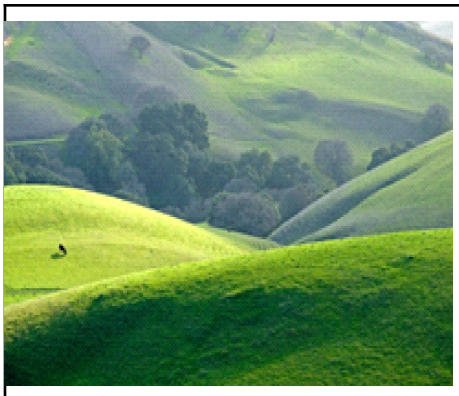
Design Plan
Student Journal

A homebuilder has decided to build a large, new neighborhood in an undeveloped area. They want the homeowners to be able to enjoy the beauty of the land and water. They have contacted your company to build a model of the area so homebuyers can choose exactly where they want their homes to be built. Construct a model of an area near the ocean with a small lake nearby. A river flows from the lake, through the valley, and between hills. The river meets the ocean and forms a delta. A portion of the land is also a flat plain.

Brainstorm your design idea here.

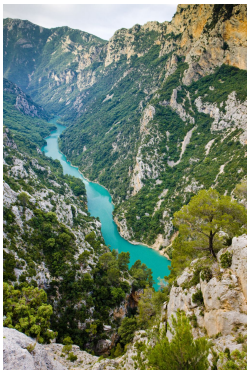
Explore

Landform Cards



Hill

Valley

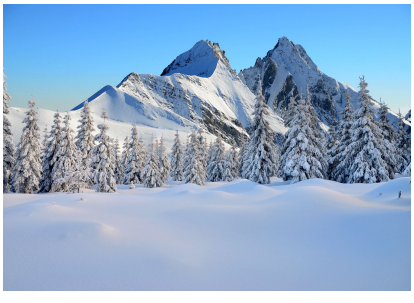


River

Lake

Delta

Ocean



Mountains

Plains

Pennisula

Explore

Name: _____ Date: _____

Real Estate Model

Teacher Rubric with Sample Student Responses

Category	2	1	0
Content	Includes adequate detail. Scientific concepts fully addressed. All constraints met.	Includes some detail. Scientific concepts partially addressed. Only some constraints met.	Includes little to no detail. Scientific concepts not addressed. Constraints unmet.
Organization	Project is well-organized. Scientific vocabulary is used correctly.	Project is somewhat organized. Some scientific vocabulary is used correctly.	Project is unorganized. No scientific vocabulary is used, or vocabulary is used incorrectly.
Presentation	Final product has a neat appearance with detailed illustrations. Student can easily discuss project findings.	Product is clearly presented with at least one illustration and student can talk about project findings.	Product is not neatly presented and lacks illustrations. Student requires prompting to discuss findings.

Mapping Our World

Reflect

Have you ever wanted to go somewhere but did not know how to get there? How did you find the answers?

Maps show us where things are in the world. If you wanted to look up what state the Grand Canyon is in, you could find it on a map. A map also shows us the different shapes and kinds of land and water in an area.

Using a map, we can find landforms such as mountains, rivers, and canyons. What makes them so special, and why are they on a map?

They are different kinds of landforms. What other kinds of landforms can you think of? How could you identify them on a map?

The Grand Canyon is a 277 mi. gorge in northern Arizona. In some places, the canyon is a mile deep!

What is a landform?

A landform is a natural structure on Earth's surface. Most landforms are formed slowly over millions of years. They form Earth's geography, or physical features. Landforms are made of rocks, soil, sand, or water.

Scientists who study geography are called geographers.

Landforms are always changing, but maps do not change as often. Why is this?

Most changes happen so slowly that you would never notice them without special tools. Scientists use these tools to make very precise measurements over long periods of time.

What are some different types of landforms?
Landforms come in different shapes and sizes. Four common landforms are mountains, hills, valleys, plains, and deserts. You can use certain characteristics to identify each type.

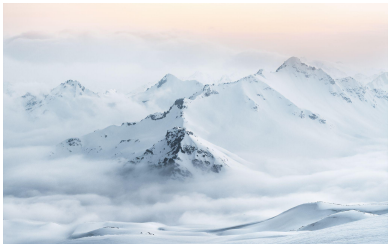
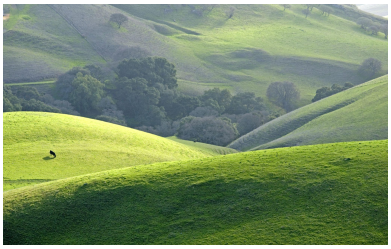
- Mountains are large landforms made of rocks that are steep (rise quickly) and have a point at the top. Some mountains are so tall that the tops are covered in snow all year—even during the summer!

- Hills are landforms that are similar to mountains. Hills are not peaked on top. Instead, hills have soft, rounded tops. They are made of grass, dirt, and rocks. Hills are not as tall as mountains.

- Valleys and canyons are low areas between two mountains or hills. A valley or canyon can be large or small, depending on how far apart the mountains or hills are. Both are usually carved out of rock.

- Plains are the flattest landforms and can be very large. The Great Plains of the United States stretch across much of the center of the country. They contain rich soil, which can be farmed.

- Deserts are landforms that receive very little rainfall. Many deserts in the United States are in the western part of the country. They can be made of sand or rocks and grow plants that don't need much water like brush and cacti.

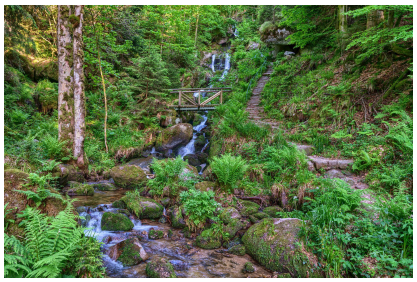




Reflect

What are the different bodies of water?
In addition to landforms, Earth is covered with different bodies of water that come in different shapes and sizes. Oceans, lakes, rivers, streams, and ponds are a few examples. You can use certain characteristics to identify each type.

- Oceans are large bodies of water. You cannot usually see land on the other side of an ocean because of its size. Oceans contain salt water.
- Lakes are smaller than oceans. They can be large or small. Most lakes hold fresh water, but some lakes have salt water in them. All lakes are surrounded by land on all sides.
- Rivers are flowing water. They are freshwater bodies of water. Rivers often form valleys or canyons. As water runs through valleys or canyons, they can become wider or deeper over time.
- Streams are similar to rivers, but they are much smaller in size. Since some streams are not very deep, they may dry up after long periods without rain.
- Ponds are similar to lakes, but they are much smaller in size. Since some ponds are shallow, they may dry up if there is no rain for a long time.




What Do You Think?

How can we represent landforms and bodies of water?
Some common ways to show information about landforms and bodies of water are maps, globes, and other models.

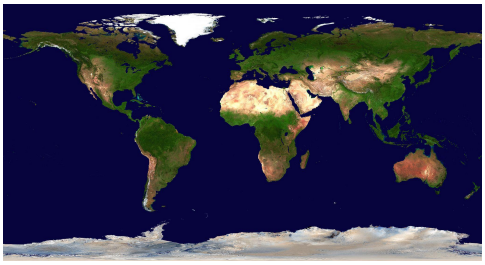
Many famous explorers used maps to draw what they found in a new area. They used many details, such as landforms and bodies of water, to make sure they could come back to that place again. Others used maps to write down information they learned from space exploration.

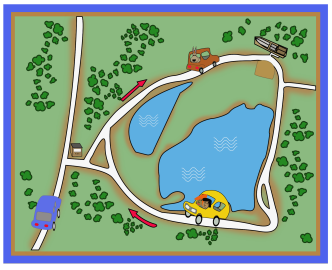
There are different kinds of maps that are used for different things.

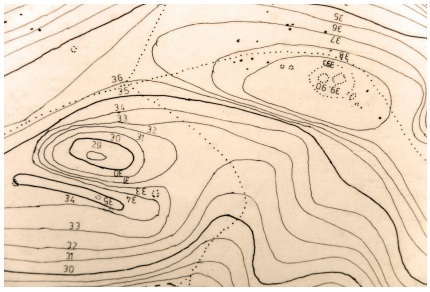
- **Physical Maps**: A physical map is used to show where different landforms and bodies of water are located. Physical maps are colored to show where mountain ranges are, and they look like they are popping up off the page. They are very useful for geographers who want to study landforms and bodies of water.

- **Aerial Maps**: An aerial map shows what something looks like from above. They can be images from a satellite or drawings done by hand. The aerial map below was created using a computer program. Can you tell where the mountains are? What other landforms do you see?

- **Topographic Maps**: This type of map uses lines to show the different heights of hills and mountains. They also show how deep a valley, ocean, or river is in an area. Many hikers and travelers rely on these maps for information.







Mapping Our World

Look Out!

Globes allow people to see what the entire world looks like. Many globes include each of the continents in one color and the water in another color. Some globes also have raised markings to show different landforms, such as mountains or hills. They are shaped like a sphere to allow us to look at the world on a smaller scale.

A globe uses different colors to show the land and the water. Some globes use blue to show where the oceans are.

Connecting With Your Child

Naming Landforms

Take a trip with your child to a local national park. If you do not live near one, find another scenic area where there are at least two landforms of the types studied in this lesson, such as hills and valleys. Be sure to bring along a notebook and crayons or colored pencils.

Make sure to ask the park rangers for a map of the park. Review the map with your child, noting places where the specific features of the area are named for landforms (such as the Great Smoky Mountains). Discuss with your child how place names can give information about the types of landforms in an area.

While at the park, ask your child to identify the types of landforms you both observe, including bodies of water. After identifying each type of landform, ask your child to create a drawing of the landforms and the bodies of water in the notebook. Be sure to label the drawing as a mountain, hill, valley, plain, desert, lake, pond, stream, river, or ocean. You may wish to ask questions, such as the following:

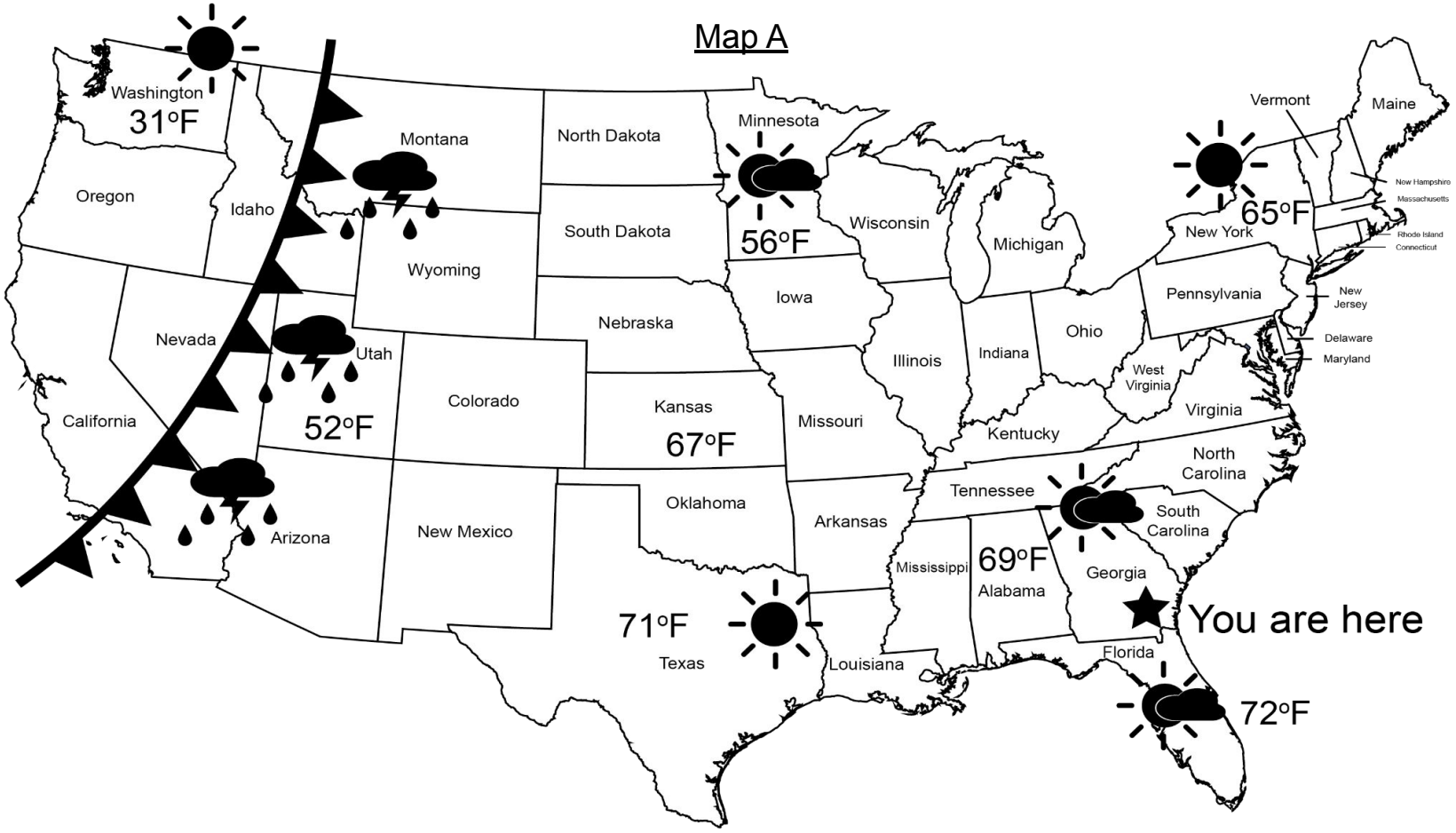
- How do you know that landform is a hill and not a mountain? (How do you know that landform is a mountain and not a hill?)
- (If you are in a valley) What is the shape of the valley? Do you see a river? Do you think a river or a glacier was the main shaper of this valley?

Linking Literacy

Name: _____ Date: _____

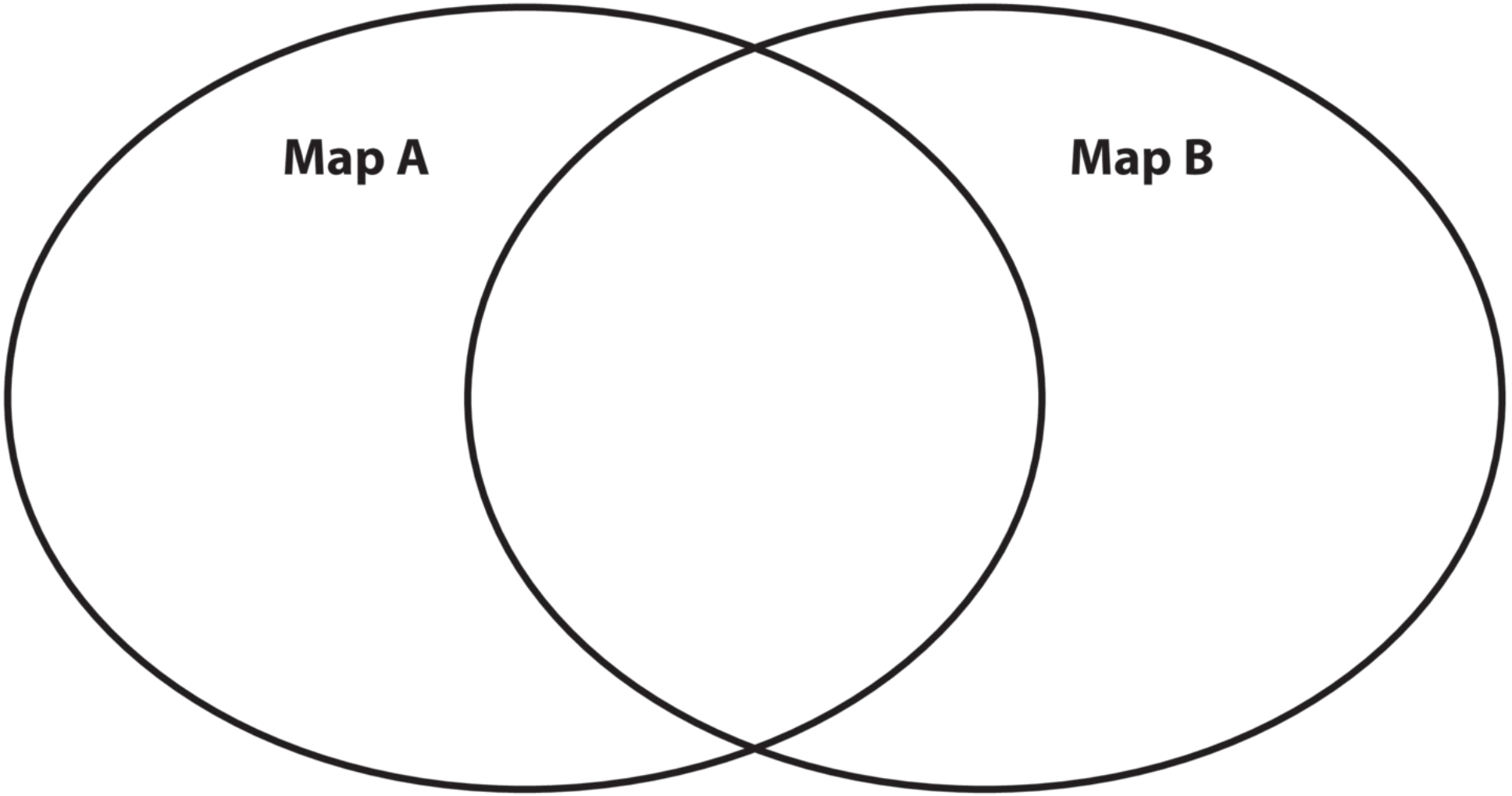
Compare and Contrast

Look at the maps. Use the Venn diagram to compare and contrast the maps. Write the words in the correct spot.



Map B

Linking Literacy



Name: _____ Date: _____

Landforms and Bodies of Water

While you read: In this text, the author describes different types of landforms and bodies of water on Earth. Write a description of each landform or body of water, and draw a picture to illustrate each.

Landform	Description	Illustration	Idea for Symbol for Map
Mountains			
Hills			
Deserts			
Valleys			
Plains			

Linking Literacy

Name: _____ Date: _____

Body of Water	Description	Illustration	Idea for Symbol for Map
Oceans			
Lakes			
Rivers			
Streams			
Ponds			

Linking Literacy

Name: _____ Date: _____

Map a New Island

After you read: Congratulations! You have just discovered a new island in the Pacific Ocean. Now you have to name it and map it. Draw a picture of your new island below. Include color and at least four symbols to show the different landforms on your island. In the map key, draw the symbols you are using, and name the landforms they symbolize.

Island Name:

Map Key