



Earth's Spheres Lesson 1: *The Solve*

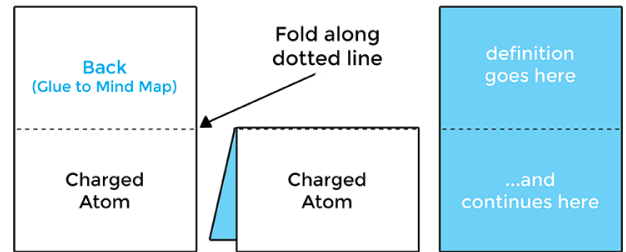
Student Guide

I. Vocabulary Warm Up

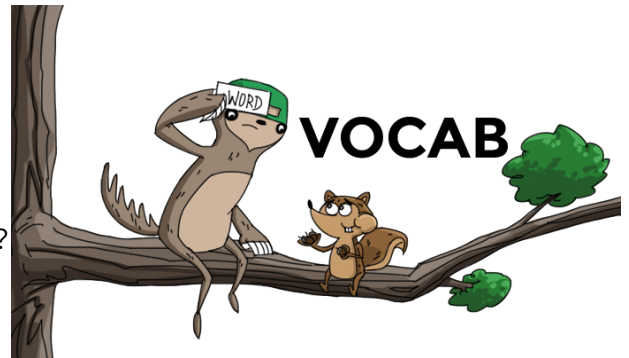
1. Using the materials at your table, cut out your vocabulary cards along the **solid lines**. Note: Do not cut the cards at the dotted lines.

2. Fold the cards at the dotted lines.

3. Write the definition of the term on the inside of the card using the definitions below.



4. Use the clues from the Mind Map images, definitions, and vocabulary terms to place the cards in the correct location on the Mind Map, explaining your thinking to group members as you go.
5. When you're ready to glue or tape, raise your hand so you can check your Mind Map with your teacher.
6. Use glue or double-sided tape to connect the back of the vocabulary card to the correct place on the Mind Map.
7. Use your completed Mind Map to discuss these questions with your group.
 - a. Which sphere contains rain?
 - b. Which sphere contains pebbles?
 - c. Which sphere contains oxygen gas?
 - d. Can you think of an example of an event on Earth that may impact more than one sphere?

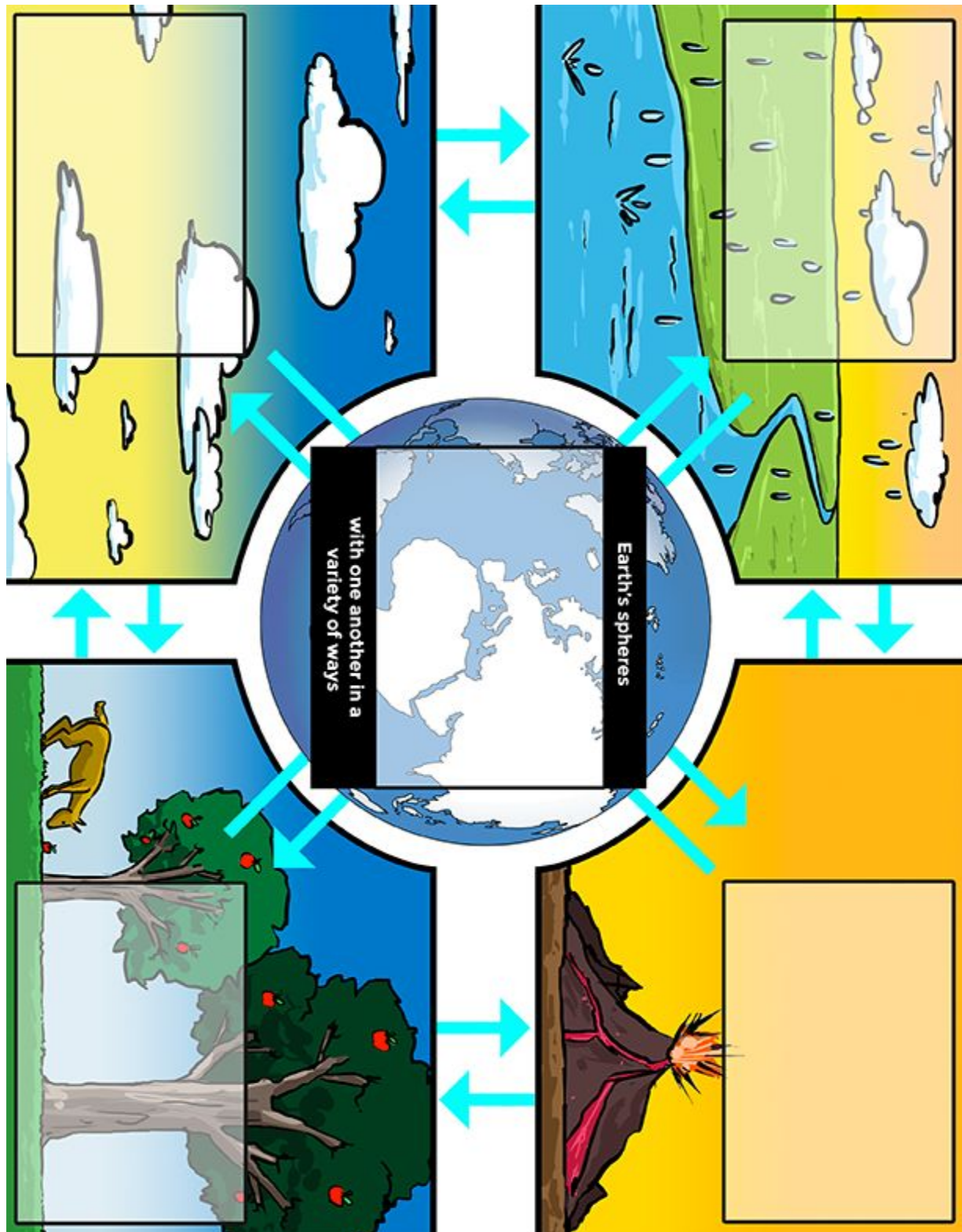




MOSA MACK SCIENCE

STUDENT GUIDE

Mind Map





MOSA MACK SCIENCE

STUDENT GUIDE

Vocabulary Cards

<div></div> <div>Atmosphere</div>	<div></div> <div>Geosphere</div>	<div></div> <div>Interact</div>
<div></div> <div>Biosphere</div>	<div></div> <div>Hydrosphere</div>	

Vocabulary

- Hydrosphere: All of the water on Earth.
- Atmosphere: All of the gases that surround Earth.
- Biosphere: All of the living things on Earth.
- Geosphere: All of the solid parts on Earth.
- Interaction: A relationship where one thing has an effect upon another.
- Interact: To come together to have an effect on each other.



MOSA MACK SCIENCE

STUDENT GUIDE

II. Read/Watch Mosa Mack

Either on your own, in a small group, or as a class (your teacher will let you know), read or watch Mosa Mack's mystery on Earth Spheres. Then answer the questions digitally or on paper below. Include a page number/time code in your answer as evidence of where you found your answer.

Name: _____

Date: _____

Episode Questions

1. Why are Felix and JoJo upset about the Petro-Proud Petroleum commercial?

2. Explain what makes up each of Earth's spheres:

- a. Hydrosphere
- b. Atmosphere
- c. Geosphere
- d. Biosphere

3. What causes the oil to move in the water?



MOSA MACK SCIENCE

STUDENT GUIDE

4. Give an example of how oil can affect the biosphere (hint: think about the coral reef).

5. How does an oil rig impact the geosphere?

6. How can oil impact the atmosphere? Explain.

7. What did Felix and JoJo figure out? Does an oil spill only affect one sphere? Explain.



MOSA MACK SCIENCE

STUDENT GUIDE

III. Quiz: Check for Understanding

Complete the exit ticket below or you can take the quiz online!

Name: _____

Date: _____

Circle one answer for each of the questions below.

1. The sphere that consists of water is called the:
 - a. Atmosphere
 - b. Geosphere
 - c. Biosphere
 - d. Hydrosphere

2. Lava erupts from a volcano and later cools into rock. This newly formed rock would be part of the:
 - a. Atmosphere
 - b. Geosphere
 - c. Biosphere
 - d. Hydrosphere

3. If oil spills in the ocean, it washes up onto a beach. What spheres are the ocean and sand a part of?
 - a. Atmosphere and Hydrosphere
 - b. Hydrosphere and Geosphere
 - c. Geosphere and Atmosphere
 - d. Biosphere and Atmosphere

4. A deer is viewed drinking water from a stream. The deer and stream are part of which sphere(s)?
 - a. Biosphere
 - b. Hydrosphere
 - c. Atmosphere
 - d. Both a. and b.

5. Oil from the ocean can enter into the atmosphere through what process?
 - a. Evaporation
 - b. Digestion
 - c. Migration
 - d. Rain

6. True or False: If something happens in one sphere, it only affects that sphere.
 - a. True
 - b. False