

Warm-Up | Spheres of Earth



Lesson Question



Lesson Goals

Distinguish the four major parts of the Earth



Explain how Earth's four spheres interact.



Words to Know

Write the letter of the definition next to the matching word as you work through the lesson. You may use the glossary to help you.

- | | |
|-------------------|---|
| _____ hydrosphere | A. the parts of land, sea, and atmosphere in which organisms live |
| _____ cryosphere | B. the solid part of Earth |
| _____ geosphere | C. the part of Earth consisting of frozen water |
| _____ atmosphere | D. all of Earth's water |
| _____ biosphere | E. the blanket of gases that surrounds the surface of a planet |



Systems

A system is a group of parts that work together as a .

- A in one part of the system affects all other parts.

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Atmosphere

The **atmosphere** refers to the surrounding .

The atmosphere:

- is a mixture of and .
- Earth's surface.

Hydrosphere

The **hydrosphere** refers to Earth's .

The hydrosphere:

- covers about 71 percent of Earth's .
- includes oceans, lakes, rivers, streams, and .
- includes the , the part of Earth containing frozen water.

Biosphere

The **biosphere** refers to all on Earth.

The biosphere:

- includes organisms in the air, on , and in water.

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Geosphere

The **geosphere** refers to the mostly part of Earth.

The geosphere:

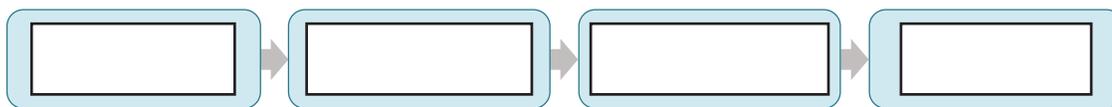
- includes rocks, minerals, , and Earth's interior.

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Example: Photosynthesis

- Plants in the biosphere take in carbon dioxide from the .
- Their roots take in water and nutrients from .
- Plants make food through photosynthesis and release into the atmosphere.
- Energy stored in is transferred to humans and animals that eat them.

Example: Volcanoes



- Volcanic eruptions
- Release of particles
- Formation of water droplets
- Plant growth
- Rainfall

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Example: Human Activity

Human activity can affect Earth's .

- Humans build dams out of from the geosphere.
- Water in the lake seeps into cliff walls behind the dam. It may become groundwater in the geosphere or into the atmosphere.
- Humans use from the water.
- Hydroelectric plants generate electricity.

Summary

Spheres of Earth

**Lesson
Question**

How do the parts of the Earth system interact?

**Answer**

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2**Review: Key Concepts**

Four spheres make up the Earth system.

1.

2. Hydrosphere

3.

4. Geosphere

Because the four spheres are interconnected, a change in any sphere ultimately affects the others.



Summary

Spheres of Earth

Use this space to write any questions or thoughts about this lesson.

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