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Chapter 2: Earth's Structure

Lesson 1: Spherical Earth

Evaluate

Visual Summary

Concepts and terms are easier to remember when they are associated with an image. Ask: Which Key Concept does each image relate to?

FOLDABLES

how Earth formed and obtained a spherical shape.

Use Vocabulary

- . The Earth system made mainly of surface water is called the _____. hydrosphere **DOK 1**
- . Use the term density in a sentence. Sample answer: The density of iron is greater than the density of water DOK 1

Understand Key Concepts

- . Which is part of the atmosphere?
- . a rock
- !. a tree
- . oxygen gas
- I. the ocean
 - C. oxygen gas DOK 1
- Describe how gravity affected Earth's shape during Earth's formation. Heat from Earth's interior changed rocks until they began to flow. Gravity pulled in on the irregular rocky surface, and Earth became spherical. DOK 2

Interpret Graphics

• **Organize** Copy and complete the graphic organizer below. In each oval, list one of the following terms: geosphere, hydrosphere, atmosphere, biosphere, and cryosphere.



Earth should be in the center of the graphic organizer, and the systems should be in the surrounding ovals, in any order. **DOK 2**

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Critical Thinking

Combine your understanding of how Earth became spherical and observations of the Moon. Then form a hypothesis about the formation of the Moon.

Sample answer: Earth developed its spherical shape when it got large enough to heat up and some materials began to flow under the force of gravity. Because the Moon is also spherical, I hypothesize that it, too, was large enough to melt some materials so that they could flow. **DOK 3**

Explain As Earth formed, did it grow larger or become smaller? Explain your answer. Sample answer: Earth likely grew smaller as its interior melted, rock flowed, and gravity pulled in its irregular bumps. DOK 3

Math Skills 🐥

• At a given temperature, 3.00 m³ of carbon dioxide has a mass of 5.94 kg. What is the density of carbon dioxide at this temperature?

D = m/V; $D = 5.94 \text{ kg} \div 3.00 \text{ m}^3 = 1.98 \text{ kg/m}^3$. **DOK 2**

What do you think NOW?

Have students review their answers from **What do you think?** at the beginning of the chapter. Have students rewrite disagree statements to make them true. See possible answers on the **Get Ready to Read** page at the beginning of this chapter.

Resources Online Quiz: Spherical Earth Online Quiz – Spanish: Spherical Earth

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