Earth: The Water Planet • Adapted Reading and Study

Surface Water (pages 65–73)

River Systems (pages 66–67)

Key Concept: A river and all its tributaries together make up a river system.

- All fresh water comes from precipitation. Fresh water on Earth may be moving, as in streams and rivers. Or, it may be still, as in ponds and lakes.
- **Tributaries** are the streams and small rivers that flow into a big river.
- The land area that supplies water to a river system is called a **watershed**. A river drains a region. The watershed of the Mississippi River covers nearly one third of the United States.
- A **divide** is a ridge of land that separates one watershed from another watershed. Streams on each side of a divide flow in different directions.

Answer the following questions. Use your textbook and the ideas above.

1. Draw a line from each term to its meaning.

Term	Meaning
tributary	 a. the land area that supplies water to a river system
watershed divide	 b. a ridge of land that separates one watershed from another
	c. a small river that flows

into a big river

Date

Earth: The Water Planet • Adapted Reading and Study



- 2. The map above shows part of a river system. Circle the letter of each river that is a tributary.
 - a. Missouri River
 - b. Mississippi River
 - c. Ohio River
- **3.** Is the following sentence true or false? All fresh water comes from precipitation.

Ponds and Lakes (pages 68-71)

Key Concept: Ponds and lakes form when water collects in hollows and low-lying areas of land.

- Ponds and lakes are bodies of fresh water. They contain still water, which is also called standing water.
- Ponds and lakes get their water from rain, from melting snow, and from runoff. Some ponds and lakes get their water from rivers or from groundwater.
- Many different kinds of organisms find habitats in ponds. Plants grow throughout a pond. Plantlike organisms called algae also live in ponds.

Earth: The Water Planet • Adapted Reading and Study

- Lakes also provide habitats for many different kinds of organisms. In shallow water near the shore, a lake has organisms that are much like those in a pond. Fewer organisms live in deeper water. Fish can live throughout a lake.
- Lakes and ponds form when water collects in low areas of land. The Great Lakes formed when huge glaciers made hollow places in the land and then melted.
- People can make lakes by building a dam across a river. A **reservoir** is a lake that stores water for human use.

Answer the following questions. Use your textbook and the ideas on page 45 and above.

- **4.** Circle the letter of each sentence that is true about ponds and lakes.
 - a. People can make lakes by building a dam across a river.
 - **b.** Lakes provide habitats for many different kinds of organisms.
 - c. Some ponds and lakes get their water from groundwater.
- 5. A lake that stores water for human use is a(an)

How Lakes Can Change (pages 72–73)

Key Concept: In addition to seasonal changes, a lake can undergo long-term changes that may eventually lead to its death.

• Lakes change as the seasons change. For example, the water is warmer in summer than in winter.

Date

Earth: The Water Planet • Adapted Reading and Study

- Temperature differences through a year cause water to sink and rise in lakes. This mixes the water and spreads nutrients through a lake. **Nutrients** are substances that plants and algae need to grow.
- A lake may change over a long period of time because of eutrophication. Eutrophication (yoo troh fih κAY shun) is the build up of nutrients in a lake.
- The buildup of nutrients causes algae to grow over the surface of a lake. Plants under the algae die. Animals that depend on the plants for food also die. Dead material fills up the lake, making it shallower. After a time, the lake dies, and a grassy field takes over.
- Sometimes lakes and ponds die because a river or stream that provides water dries up.

Answer the following questions. Use your textbook and the ideas on page 46 and above.

6. Read each word in the box. In each sentence below, fill in the correct word.

eutrophication nutrient habitat

- a. The build up of nutrients in a lake is called
- **b.** A substance that plants and algae need to grow is a(an) _____.
- 7. Circle the letter of each sentence that is true about how lakes can change.
 - **a.** Sometimes a lake dies because a river that provides water dries up.
 - **b.** Lakes change as the seasons change.
 - **c.** The buildup of nutrients in a lake causes algae to grow over the surface of the lake.