

Skills Worksheet

Active Reading**Section: Minerals and Mineral Resources**

Read the passage below and answer the questions that follow.

Certain metals are of major economic and industrial importance. Some metals can be pounded or pressed into various shapes or stretched very thinly without breaking. Other metals are good conductors of heat and electricity, or are prized for their durability and resistance to corrosion. Often, two or more metals are combined to form *alloys*. Alloys are important because they often combine the most desirable properties of the metals used to make them. Many new technologies depend on the mining of metallic minerals.

Nonmetals are among the most widely used minerals in the world. For example, gypsum has many applications in the construction industry. It is used to make Sheetrock™, or wallboard, for homes and commercial buildings. It is also a major component of concrete, which is used to build roads, buildings, and other structures. Industrial sand and gravel have uses that range from glassmaking to the manufacture of computer chips. Some non-metallic minerals, called *gemstones*, are prized purely for their beauty, rarity, or durability. Important gemstones include diamond, ruby, sapphire, emerald, aquamarine, topaz, and tourmaline.

IDENTIFYING MAIN IDEAS

One reading skill is the ability to identify the main idea of a passage. The main idea is the main focus or key idea. Frequently, a main idea is accompanied by supporting information that offers detailed facts about the main idea.

In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- _____ 1. The value of a mineral is determined by its
- a. properties.
 - b. mining technique.
 - c. gemstones.
 - d. alloys.
- _____ 2. What types of minerals are among the most widely used in the world?
- a. metals
 - b. alloys
 - c. gemstones
 - d. nonmetals
- _____ 3. Which of the following is an example of a gemstone?
- a. gypsum
 - b. sapphire
 - c. gravel
 - d. glass

Active Reading *continued*

VOCABULARY DEVELOPMENT

In the space provided, write the letter of the description that best matches the term or phrase.

- | | |
|--------------------------|---|
| _____ 4. gypsum | a. the combination of two or more metals |
| _____ 5. gemstones | b. a major component of concrete |
| _____ 6. industrial sand | c. conductors of heat and electricity |
| _____ 7. alloy | d. topaz and tourmaline |
| _____ 8. certain metals | e. a substance used in manufacturing computer chips |

Read each question and write the answer in the space provided.

9. The verb *corrode* means “wear away gradually, usually by a chemical reaction.” A metal that is prized for its “resistance to corrosion” has what property?

10. *Aqua* means “water” or “a light blue color.” *Marine* refers to the sea. Use this information to determine what the gemstone *aquamarine* might look like.

RECOGNIZING CAUSE AND EFFECT

One reading skill is the ability to recognize cause and effect.

In the space provided, write the letter of the phrase that best answers the question.

- _____ 11. Why do people value gemstones?
- | | |
|--------------------------------------|------------------------------------|
| a. for their use in industry | c. for their beauty and rarity |
| b. for their resistance to corrosion | d. for their benefit to technology |

Read each question and write the answer in the space provided.

12. Why are alloys especially important?

13. What are some properties of metals that give them economic and industrial importance?

