Name _____ Class _____ Date _____

Skills Worksheet

Active Reading

Section: Solid Waste

Read the passage below and answer the questions that follow.

Solid waste from manufacturing, mining, and agriculture makes up much of the total solid waste produced in the United States. Solid waste from manufacturing makes up 56 percent of the total solid waste produced and includes items such as scrap metal, plastics, paper, sludge, and ash. Although consumers do not directly produce waste from manufacturing, they indirectly create it by purchasing products that have been manufactured.

Waste from mining consists of the rocks and minerals that are left over from excavation and processing. This waste is left exposed in large heaps, is dumped in oceans or rivers, or is disposed of by refilling and landscaping abandoned mines. Agricultural waste makes up 9 percent of the total solid waste produced and includes crop wastes and manure. Because agricultural waste is biodegradable, it can be broken down and returned to the soil. However, the increasing use of fertilizers and pesticides may cause agricultural waste to become more difficult to dispose of because the waste may be harmful if returned to the soil.

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.** Solid waste from manufacturing includes
- **a.** crop wastes.
- **b.** rocks.
- **c.** minerals.
- **d.** plastics.

_____ **2.** Waste from mining
- **a.** is biodegradable.
- **b.** is sometimes dumped in oceans or rivers.
- **c.** includes paper and plastics.
- **d.** is produced by consumers.

_____ **3.** What portion of the solid waste produced in the United States is agricultural waste?
- **a.** 56 percent
- **b.** 20 percent
- **c.** 9 percent
- **d.** 90 percent

Name _____ Class _____ Date _____

VOCABULARY DEVELOPMENT

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

4. The verb *degrade* means "break down." The prefix *bio-* refers to living things. The suffix *–able* means "capable of." Use this information to define *biodegradable.*

_____

_____

RECOGNIZING SIMILARITIES AND DIFFERENCES

One reading skill is the ability to recognize similarities and differences between two phrases, ideas, or things. This is sometimes known as comparing and contrasting.

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

_____ **5.** Agricultural waste may be easier to dispose of than other types of solid waste because agricultural waste
- **a.** can be broken down and returned to the soil.
- **b.** is often left exposed in large heaps.
- **c.** may be used to refill abandoned mines.
- **d.** makes up a small percentage of the total solid waste.

_____ **6.** Manufacturing waste is different from mining waste in that manufacturing waste
- **a.** is processed and then purchased by consumers.
- **b.** is most difficult to dispose of.
- **c.** includes products created by human beings.
- **d.** is biodegradable.

RECOGNIZING CAUSE AND EFFECT

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

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

7. How do consumers indirectly create manufacturing waste?

_____

8. The increasing use of which products may cause agricultural waste to become difficult to dispose of?

_____

9. How does the use of these products make agricultural waste more difficult to dispose of?

_____

_____

Name _____ Class _____ Date _____

Skills Worksheet

Active Reading

Section: Reducing Solid Waste

Read the passage below and answer the questions that follow.

When most people think about recycling, they probably think of only the first step of bringing their bottles, cans, and newspapers to a recycling center or putting these things at the curb in specially marked containers. However, recycling actually involves a series of steps that must happen for recycling to work.

First, the discarded materials must be collected and sorted by type. Next, each type of material must be taken to a facility where it can be cleaned and made ready to be used again. For example, glass is sorted by color and is crushed, and paper is sorted by type and made into pulp with water. Then the materials are used to manufacture new products. Finally, the new products are sold to consumers. If more people buy products made from recycled materials, there will be an increase in the demand for these products. This demand encourages manufacturers to build facilities to make recycled products. When such facilities are built, it becomes easier for communities to sell the materials they collect from residents for recycling.

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.

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

1. What types of products do people commonly recycle?

_____

_____

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

_____ **2.** Before glass is recycled, it is sorted by

a. size. **c.** type.
b. shape. **d.** color.

_____ **3.** Which of the following is the first step of recycling?

a. sorting materials by type
b. cleaning and preparing materials
c. taking bottles, cans, and newspapers to a recycling center
d. using recycled materials to make new products

SEQUENCING INFORMATION

One reading skill is the ability to sequence information, or to logically place items or events in the order in which they occur.

Beginning with step 1, write the four steps involved in recycling in the sequence in which they occur. Write each step in the space provided.

4. Step 1: _____

_____

5. Step 2: _____

_____

6. Step 3: _____

_____

7. Step 4: _____

_____

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

8. What happens to discarded paper before it is used to make new products?

_____

_____

9. What happens to discarded glass after it is sorted but before it is made into new products?

_____

_____

CAUSE AND EFFECT

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

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

10. How might manufacturers react to increased demand for recycled products?

_____

_____

11. What effect does an increase in the number of facilities that make recycled products have on communities?

_____

_____

Name _____ Class _____ Date _____

Skills Worksheet

Active Reading

Section: Hazardous Waste

Read the passage below and answer the questions that follow.

Some hazardous wastes are disposed of by burning, often in specially designed incinerators. Incinerators can be a safe way to dispose of waste, but they have several problems. Incineration is generally the most expensive form of waste disposal because incinerators require a lot of energy to operate. Incinerators also need pollution-control devices and need to be carefully monitored so that hazardous gases and particles are not released into the air. Also, after hazardous waste is incinerated, the leftover ash needs to be buried. This ash is usually buried in a hazardous waste landfill.

When we put hazardous waste into disposal facilities for long-term storage, the wastes do not disappear. Instead, they must be closely monitored. For example, disposal of radioactive wastes from nuclear reactors is an especially difficult storage problem. The only way to make the radioactive wastes nonhazardous is to let them sit for thousands of years until the radioactivity decreases to safe levels. Therefore, engineers and geologists search for disposal sites that probably will not be damaged by movements of the Earth for thousands of years.

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 phrase that best completes each statement.

_____ **1.** Incinerators are used to
- **a.** control pollution.
- **b.** store hazardous wastes.
- **c.** burn hazardous wastes.
- **d.** dispose of radioactive wastes.

_____ **2.** After hazardous waste is incinerated, the leftover ash is
- **a.** stored in a long-term storage facility.
- **b.** buried in a special landfill.
- **c.** left to sit for thousands of years.
- **d.** monitored for hazardous gases.

_____ **3.** Wastes from nuclear reactors are
- **a.** radioactive.
- **b.** nonhazardous.
- **c.** gaseous.
- **d.** expensive.

VOCABULARY DEVELOPMENT

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

4. A *hazard* is a "source of danger." *Waste* is "something that is discarded." What is *hazardous waste?*

_____

_____

SEQUENCING INFORMATION

One reading skill is the ability to sequence information, or to logically place items or events in the order in which they occur.

Sequence the statements below to show the steps in the process of disposing of radioactive waste. Write "1" on the line in front of the first step, "2" on the line in front of the second step, and so on.

_____ **5.** Sites are closely monitored.

_____ **6.** Scientists locate a site that will not be damaged by Earth movements.

_____ **7.** Radioactive wastes are stored.

_____ **8.** Disposal facilities are built.

_____ **9.** Wastes sit for thousands of years.

RECOGNIZING CAUSE AND EFFECT

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

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

10. Name two reasons why incinerators are the most expensive form of waste disposal.

_____

_____

11. Why must incinerators be carefully monitored?

_____

_____

12. Why do engineers and geologists try to find disposal sites that are unlikely to be damaged by movements of the Earth?

_____

_____