

## Active Reading

### 12.1 Section: What Causes Air Pollution?

Read the passage below and answer the questions that follow.

Many industries and power plants that generate our electricity must burn fuel to get the energy they need. They usually burn fossil fuels. Burning fossil fuels releases huge quantities of sulfur dioxide and nitrogen oxide into the air. Power plants that produce electricity emit at least two-thirds of all sulfur dioxide and more than one-third of all nitrogen oxides that pollute the air.

Some industries also produce VOCs, which are chemical compounds that form toxic fumes. Some of the chemicals used in dry cleaning are sources of VOCs. Oil refineries, chemical manufacturing plants, furniture refinishers, and automobile repair shops also contribute to the VOCs in the air. When people use some of the products that contain VOCs, more VOCs are added to the air.

#### 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 main ideas.

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

- \_\_\_\_\_ 1. What do most industries and power plants use for energy?
- |                   |                  |
|-------------------|------------------|
| a. VOCs           | c.sulfur dioxide |
| b. nitrogen oxide | d. fossil fuels  |
- \_\_\_\_\_ 2. What type of industry produces two-thirds of all sulfur dioxide that pollutes the air?
- |                                   |                                    |
|-----------------------------------|------------------------------------|
| a. air conditioning manufacturers | c.long-distance trucking companies |
| b. dry cleaners                   | d.electrical power plants          |
- \_\_\_\_\_ 3. Which of the following does not produce volatile organic compounds (VOCs)?
- |                 |                           |
|-----------------|---------------------------|
| a. organic farm | c. furniture refinisher   |
| b. oil refinery | d. automobile repair shop |
- \_\_\_\_\_ 4. What happens when people use a product that contains VOCs?
- |   |
|---|
| a. They get very sick.                                  |
| b. Nothing happens.                                     |
| c. More VOCs are added to the air.                      |
| d. The VOCs return to the atmosphere as carbon dioxide. |

**Active Reading** *continued*

- \_\_\_\_\_ 5. Power plants that produce electricity emit
- a. sulfur dioxide and nitrogen oxide. c. nitrogen oxide and VOCs.
  - b. sulfur dioxide and VOCs. d. fossil fuels.

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

6. What are VOCs?

\_\_\_\_\_

7. Reread the first four sentences of this passage. Given this information, do you think sulfur dioxide and nitrogen oxides in the air are harmful or beneficial? Explain your answer.

\_\_\_\_\_

\_\_\_\_\_

**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.**

8. Why do power plants emit such a high percentage of pollutants?

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9. List four examples of industries that can be sources of VOCs in the air.

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10. What percentage of pollutants do electrical power plants emit into the air?

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11. What can you do to help reduce the amount of VOCs in the air?

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