

## STEPS IN Determining Cause and Effect

### 1 Identify the Effect

To find the effect, ask yourself “what happened?” Keep an eye open for clue words and phrases that signal effects, such as *so*, *as a result*, *consequently*, and *therefore*.

*In 1859, Thomas Austin of Australia wanted to hunt rabbits for sport, **so he imported 24 wild rabbits from England.***

The effect was that Austin imported rabbits into Australia.

### 2 Identify the Cause

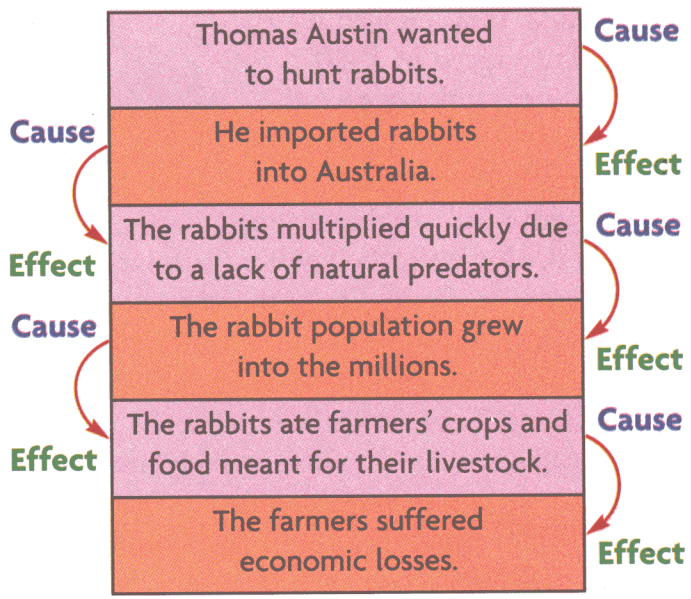
To find the cause of an event, ask yourself “why did it happen?” Look for words and phrases that signal a cause: *as a result of*, *because*, *due to*, and *since*.

***Because the rabbits had few natural predators in Australia, they multiplied very quickly.***

The cause was that the rabbits had few natural predators in Australia.

### 3 Look for Chain Reactions

A chain reaction occurs when a cause or effect leads to future causes and effects. An event that is an effect can also be an event that causes something else to happen.



#### TIPS

- Some causes have two or more effects that occur at the same time. Some effects have more than one cause.
- Not all causes and effects have signal words. Read carefully to see how the events are related.

# USE THIS SKILL

## Determine Cause and Effect

Read the following passage and list five examples of cause-and-effect relationships. Remember that in a chain reaction an effect can be a cause for another effect. Not all causes and effects use signal words.

### *The Arrival of Dutch Elm Disease*

Huge loads of lumber and other materials arrive in the United States every day. When parts of shipments slip by without careful inspection, foreign insect species occasionally gain entrance to a whole new environment. Some of these insects come from much warmer climates, and as a result, they fail to thrive in North America. Because others are better suited to living here, they quickly reproduce. That's what happened with the European elm bark beetle. At the beginning of the twentieth century, this beetle most likely came over from Europe on a shipment of elm logs. The elm beetle spread throughout the United States, where it tunneled through the bark of elm trees. As a result, the trees were infected with a deadly fungus known as Dutch elm disease. As a consequence, elm trees across the nation began dying, and this once common tree that lined city streets everywhere has only a few survivors.



#### TEST TIP

On some tests you may be asked to describe important events. When you write, think about the causes and effects associated with the event. This will show that you understand the event well.

## Practicing Skill 12

**HOW TO** Determine Cause and Effect

Read the following passage. Search for causes and effects as you read. Then answer the questions below.

*Crazy Kudzu*

*More than a hundred years ago, a plant was introduced to the United States from Japan. Consequently, the ivylike weed has grown out of control and caused a variety of problems, particularly in the southeastern states.*

*Kudzu was first brought to the United States as part of the Philadelphia Centennial Exposition in 1876. Many American gardeners found the new climbing plant so attractive that they planted it in their gardens and yards.*

*As the plant become more common, people discovered other benefits and therefore worked to spread it even farther. Kudzu was believed to be useful for controlling land erosion, so it was planted in fields and at the sides of roads. Farmers discovered that goats and other livestock would graze in the fields of kudzu, and the weed was seen as a source of food. As a result, the spread of kudzu continued.*

*Unfortunately, there are many drawbacks to the nonnative plant. It can kill trees by blocking out light. The vines have caused destruction in many areas of the South, damaging buildings and pulling down power lines. Kudzu can grow so fast that controlling it is very difficult. Other native species of plants often can't survive in the presence of kudzu. This invader has seriously disturbed the natural balance of plant and animal life in these areas.*

1. What happened when kudzu was first introduced to the United States?

\_\_\_\_\_

2. What contributed to the spread of kudzu? Find three causes in the reading passage. \_\_\_\_\_

\_\_\_\_\_

3. Why is kudzu considered a problem plant? Find three harmful effects of the plant's spread. \_\_\_\_\_

\_\_\_\_\_

**Read the following sentences about controlling kudzu. Write a cause and an effect in the boxes below the sentences.**

1. As a result of climate, regular harvest methods, and foraging by native animals, kudzu does not grow out of control in Japan.

	→	
<b>Cause</b>		<b>Effect</b>

2. Some herbicides can be effective in controlling kudzu. Farmers have learned to use them safely because such chemicals can be harmful to the environment.

	→	
<b>Cause</b>		<b>Effect</b>

3. In some studies, researchers and farmers made sure that livestock constantly grazed on patches of kudzu. Consequently, the kudzu was destroyed.

	→	
<b>Cause</b>		<b>Effect</b>

4. Older patches of kudzu can have roots that are as deep as four feet. Therefore, landowners may need to use several types of control methods to destroy the kudzu.

	→	
<b>Cause</b>		<b>Effect</b>