LESSON 3

Recognizing Cause and Effect

When you read a story or an article, do you stop to think about what happens and why things happen? A **cause** is a reason why something happens. An **effect** is what happens. Recognizing causes and effects will help you understand how the events in a story or details in an article fit together.

Clue words such as *so*, *because*, and *since* help point out causes and effects. When there are no clue words, ask yourself the questions: *What happened?* and *Why did this happen?* Sometimes there can be more than one cause or effect.

Read the following experiment. Think about what happens and why it happens.



You can make a model of a tornado in a jar. In this experiment, the "rain" is water mixed with vinegar and liquid soap. The motion you make is like the movement of air in a tornado.

Fill a large jar three quarters full of water. Add 2 drops of food coloring, 1 teaspoon of liquid soap, and 1 teaspoon of vinegar. Tighten the lid. Shake the jar hard. Then give the jar a good twist. The liquid will form a cone that looks like a small tornado.

Think about what happens in this experiment and why it happens. Write the answers on the lines.

What happens when you shake and twist the jar?

_____

_____

What causes this to happen?

_____

_____

Tip

Recognizing causes and effects can help you understand and remember what you read.

LIVEWORKSHEETS

On Your Own

Read the article. As you read, look for causes and effects to explain what happens and why it happens.



Tornadoes are very powerful spinning winds that can form below clouds during strong thunderstorms. Tornadoes begin when warm, moist air gets trapped between a layer of cold, dry air above and a layer of warm, dry air below. The warm air gets pulled up into the thundercloud. Air pressure in the storm is very low, which causes the air to spin. It spins faster and faster and takes the shape of a funnel or cone. We can see tornadoes, or twisters, because dust is sucked up with the air.

Tornadoes are very dangerous, since they move so fast. The spinning winds inside a tornado can reach 500 miles per hour. The strong spinning wind is like a vacuum cleaner. Objects under this swirling funnel get pulled up inside it. A tornado can pick up huge objects like trees, trucks, and houses. When these objects land, they can smash and crush things. Buildings can explode inside a tornado because the air pressure in the tornado is so low and the air pressure inside the buildings is higher. This causes the air inside the buildings to burst out in an explosion.

Tornadoes usually happen during the spring and summer. They can strike at any time of day, but they are more common in the late afternoon and evening, after the heat of the day has built up.

LIVEWORKSHEETS

6. What are *two* things that cause a tornado to form? Fill in the circles.

- ○ Warm, wet air gets trapped between layers of cold and warm dry air.
- ○ It rains very hard, and there is thunder.
- ○ Rain mixes with clouds and dust.
- ○ Warm air gets pulled up, and it spins around.

Write the cause in your own words.

7. Tornadoes are dangerous because _____

_____

Practicing Vocabulary

Write a word from the box to finish each sentence.

funnel	moist	pressure	spinning	thunderstorm	tornado	explosion

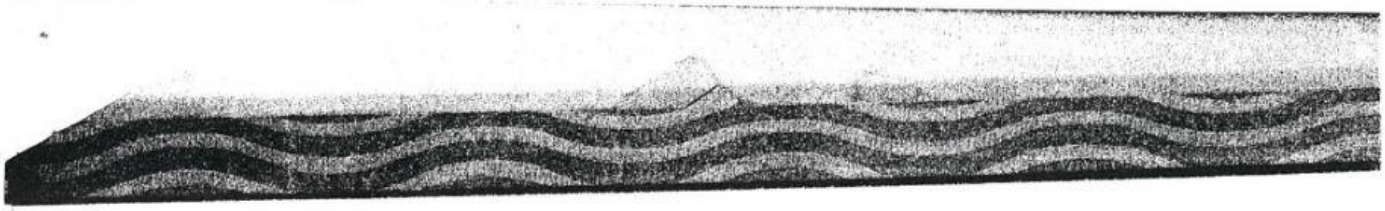
8. Mary thought the damp air felt very hot and _____ .
9. The weather forecast was for a strong _____ .
10. Then Mary saw something shaped like a cone or _____ .
11. The funnel shape was _____ around very fast.
12. Mary feared the air _____ was building in her house.
13. She opened some windows to avoid an _____ .
14. Mary knew a _____ had formed in the strong storm.

MAKING THE Reading AND Writing CONNECTION

Writing a News Report

Pretend you are a news reporter. It has just snowed for twelve hours. Three feet of snow are on the ground. What would the effects be? On another piece of paper, write a news report.

LIVEWORKSHEETS



Checking Comprehension

Write the answer to each question on the lines.

1. What makes a tornado different from a very strong wind?

_____

_____

2. Why are tornadoes so dangerous?

_____

_____

Practicing Comprehension Skills

Reread the article on tornadoes. Choose effects from the box to fill in the diagram. Then use the diagram to explain what happens during a tornado.

The air forms a funnel.	**Buildings explode.**	**Air begins to spin.**

Cause		
Air pressure is very low.	The air spins faster and faster.	Air pressure is lower inside the tornado and higher in buildings that get pulled in.

Effect		
3. _____ _____	4. _____ _____	5. _____ _____

LIVEWORKSHEETS