Eye of the Storm: Chasing Storms with Warren Faidley

Storm Hunter In spring, summer, and fall, weather patterns produce thunderstorms, tornadoes, and hurricanes in the United States. Most people take cover from storms, but photographer Warren Faidley travels around the country to take pictures of them. In August of 1992, Faidley went to Miami, Florida, to take pictures of Hurricane Andrew.

Activity

Storm Stories Share stories about storms you remember. What time of year did the storm strike? Did you know the storm was coming, and if so, how? How did the storm affect you and your family?

Comprehension Skill

Graphic Sources

Graphic sources help explain written information using visual material such as photographs, drawings, diagrams, maps, tables, and time lines.

Activity

Mapping Andrew Use the table to trace Hurricane Andrew’s route on a world map or globe.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>mid-August</td>
<td>A tropical wave forms off the western coast of Africa.</td>
</tr>
<tr>
<td>August 21</td>
<td>Tropical Storm Andrew heads west towards the Bahamas.</td>
</tr>
<tr>
<td>August 23</td>
<td>Hurricane Andrew reaches Eleuthera, an island in the Bahamas.</td>
</tr>
<tr>
<td>August 24</td>
<td>Andrew crosses the southern tip of Florida.</td>
</tr>
<tr>
<td>August 25</td>
<td>Andrew crosses the Gulf of Mexico, reaches Louisiana.</td>
</tr>
</tbody>
</table>
Verbs have different tenses to show when something is happening in time. Past tense verbs tell about actions that have already happened. For example: We heard about a storm coming. “Heard” is in the past tense.

Present tense verbs tell what is happening now. For example: We are putting things in the car. “Are putting” is in the present tense. Future tense verbs tell what will or might happen. For example: We will drive away from the coast. “Will drive” is in the future tense.

Activity
Sentence Hunt Read an article in a newspaper or magazine, a story, or a chapter in a book with a family member. Find examples of sentences that use past, present, and future tenses.
Graphic Sources

- A **graphic source** shows or explains information in the text. Pictures, maps, charts, time lines, and diagrams are all graphic sources.

**Directions** Study the following table. Then answer the questions below.

**Major Hurricanes, 1900–2000***

<table>
<thead>
<tr>
<th>Name/Date of Hurricane</th>
<th>Location</th>
<th>Category / Damage Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>unnamed (1935)</td>
<td>Florida</td>
<td>5 / catastrophic</td>
</tr>
<tr>
<td>Andrew (1992)</td>
<td>Florida, Louisiana</td>
<td>5 / catastrophic</td>
</tr>
<tr>
<td>unnamed (1919)</td>
<td>Florida, Texas</td>
<td>4 / extreme</td>
</tr>
</tbody>
</table>

*Hurricanes are rated in a range from a category 1 (minimal) to category 5 (catastrophic).

1. What does this table show?

2. What term is used to describe the force of a category 5 hurricane?

3. How many years passed between the most recent and the least recent category 5 hurricanes listed in the table?

4. Why are all of the major hurricanes in the table either category 4 or 5?

5. What other graphic source could effectively show this information? Explain.

**Home Activity** Your child identified information from a graphic source. Work with him or her to identify other graphic sources in magazines. Together, take information from a magazine article and create a graph to show it.

G5R2.1 Understand how text features (e.g., format, graphics, sequence, diagrams, illustrations, charts, maps) make information accessible and usable.
Vocabulary

Directions Choose the word from the box that best matches each definition. Write the word on the line to the left.

1. a swelling motion
2. in or toward the interior
3. statements of what is coming; predictions
4. great damage; ruin

Directions Solve the following puzzle by writing the word that matches each definition. The circled letters will spell a secret word.

5. the land away from the border of a coast
6. to break into pieces suddenly
7. devastation
8. sweep or rush, especially of waves
9. descriptions of the future
10. thought something would probably come or happen

Write a Business Letter

On a separate sheet of paper, write a business letter asking for aid after a hurricane. Decide to whom you would write this letter and what you would say. Use as many vocabulary words as you can.

Home Activity Your child identified and used vocabulary words from Eye of the Storm. Together, read an encyclopedia entry about hurricanes. Then have your child write a few descriptive sentences about hurricanes, using the vocabulary words.
Eye of the Storm

Vocabulary • Root Words

- When you come across a new word, look at the root word to figure out its meaning.
- The Latin root struct means “to build.”

Directions Read the following passage. Then answer the questions below.

The winds were growing stronger than expected, and Dee looked out the window nervously. Weather forecasts on radio and television stations called for heavy rain. News programs instructed everyone to stay indoors.

Dee knew that a storm like this could easily bring destruction. The last time there was a really bad storm, many roads flooded.

Grass and leaves had obstructed the storm drains, leaving the rain no place to go.

Suddenly, the lights went out. Her aunt’s instructions were to use a flashlight if the power went out.

Just as Dee’s aunt handed her a flashlight, they heard a loud boom. A tree branch hit the front door! Wow! This was going to be some storm.

1. How does the root struct in destruction help you understand the word?

2. What do you think the root struct has to do with instructed, meaning “taught” or “gave information”?

3. The word part con- in construct can mean with or together. What do you think obstruct means?

4. What is the meaning of instructions?

5. What is a possible connection between instructions and the root struct?

Home Activity Your child used knowledge of Latin roots to identify the meanings of words. Together, use a dictionary to find other words that contain the root struct and discuss their meanings.

R1.3 Use knowledge of root words to determine the meaning of unknown words within a passage.
Eye of the Storm

Cause and Effect

Directions Read the following article. Then answer the questions below.

Tornadoes often form near thunderstorms. In fact, a tornado and a severe thunderstorm are caused by the same conditions—that is, high humidity, unstable air near the ground, and winds. Tornadoes formed along with thunderstorms are usually accompanied by rain and wind.

The effects of tornadoes can be dramatic and extremely harmful. Tornadoes tear through parts of the United States each year, their high winds causing injuries, taking lives, and causing damage to property in towns and cities. Much of the damage and many of the injuries caused by tornadoes relate to flying debris.

Sometimes experts can predict a tornado, but other times a tornado forms by surprise. In certain conditions, many tornadoes form at one time. The United States has a warning system to inform citizens of possible tornadoes. Because people have heeded tornado warnings and taken cover, many lives have been saved over the past years.

1. What conditions cause a tornado?

2. What are two effects of a tornado?

3. What is responsible for many of the injuries and much of the damage in a tornado?

4. What has been an effect of the tornado warning system used in the United States?

5. On a separate sheet of paper, explain why a tornado drill at school might contribute to saving human lives.

Home Activity Your child read information about the causes and effects of tornadoes. Discuss a type of storm that occurs in your region. Together, discuss how people remain safe during such a storm.

172 Comprehension

R2.6 Distinguish between cause and effect and between fact and opinion in expository text.
Graphic Sources

- A graphic source shows or explains information in the text. Pictures, maps, charts, time lines, and diagrams are all graphic sources.
- As you read, use graphic sources to help you understand information. Compare information in the text with information in the graphic sources.

Directions Study the following text and diagram. Then answer the questions below.

Materials needed: 2-liter soda bottles, water, food coloring, duct tape

How to create a tornado: Fill one bottle with water and some food coloring. Connect the two bottles with duct tape. One tube will be upside down, the other right side up (see diagram). Turn the water-filled bottle to the top, twist the bottles, and watch the tornado move from top to bottom.

1. What are the materials needed to complete this activity?

2. What is the first step in creating this tornado?

3. What is another step in this activity?

4. What is an example of how the diagram might help a person complete the activity?

5. On a separate sheet of paper, make a prediction about whether or not the experiment will work. List all the reasons you think it might work or not.
Name ________________________________

**Graphic Sources**

- A **graphic source** shows or explains information in the text. Pictures, maps, charts, timelines, and diagrams are all graphic sources.

**Directions**  Read the following chart and answer the questions below.

<table>
<thead>
<tr>
<th>Type of Disaster</th>
<th>Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>flood</td>
<td>heavy rains, melting snow, ocean waves</td>
</tr>
<tr>
<td></td>
<td>coming on shore</td>
</tr>
<tr>
<td>hurricane</td>
<td>low air pressure, energy obtained from</td>
</tr>
<tr>
<td></td>
<td>contact with warm ocean water</td>
</tr>
<tr>
<td>wildfire</td>
<td>lightning, human accidents</td>
</tr>
<tr>
<td>winter storm</td>
<td>cold temperatures, moisture, winds</td>
</tr>
</tbody>
</table>

1. What tells you the topic of this graphic source?

2. Which disaster is not directly related to water?

Checking the chart’s second column shows that

3. How are the four types of disasters arranged in this chart?

Studying the chart’s first column shows that

4. Which types of disasters are never caused by human beings?

Disasters not caused by human beings are

5. How would you alter this chart to add information about the effects of disasters?

**Home Activity**  Your child used a graphic source to analyze information about disasters. Together, use graphic sources you find in reference books or on the Internet to learn more about natural disasters.
Online Telephone Directory

- An online telephone directory lists phone numbers and addresses for individual people and businesses.
- The white pages lists entries for individuals and businesses in alphabetical order.
- The yellow pages lists entries for businesses (as well as advertisements) by category, or type of business.

Directions  Examine the online yellow pages screen. For each of the five businesses listed below, write words that define the category of business you wish to search.

1. a business that sells raincoats
2. a business that sells storm shutters for windows
3. a business that sells hurricane safety kits
4. a business that sells homeowners’ insurance
5. a business that repairs storm-damaged roofs
Directions  Use the online yellow pages screen to answer the following questions.

6. Why is it important to include the city and state for the business you are searching for online?

7. If you knew the type—but not the name—of a business, would it best to use the white pages or yellow pages to find it? Why?

8. What might be the result if your search keywords were spelled incorrectly?

9. If you remembered only part of the name of a local business, how would you search for its telephone number?

10. Why might a person choose to use an online telephone directory instead of a regular telephone book?

Home Activity  Your child learned about locating and collecting information using various sources, including an online telephone directory. Together, search for three businesses using the white and yellow pages of an online directory and of a print telephone book.