

## THE HURRICANE

Terrance peered cautiously out the window of his family's summer cottage. Even though it was noon, there was no sign of light. Dark, tumbling clouds took over the sky, robbing the sun of any chance it had of illuminating the yard in front of the cottage. Long powerful fingers of lightning shot across the clouds, and Terrance could hear the constant rumble of thunder in the distance. He glanced at his parents for reassurance, but they were also looking at the approaching storm with worried expressions. His father had spent the last hour putting all the lawn furniture into the garage. His mother had filled the bathtub and the sinks with water in case there was an outage.

This particular storm would become a **hurricane**, a severe tropical storm that feeds off the evaporation of warm ocean water and moisture. With the right conditions, hurricanes can grow powerful enough to create dangerous winds, huge waves, and torrential downpours.

Terrance noticed that the wind was getting stronger. A set of wind chimes, which normally hung peacefully on the patio, were flailing violently, crashing together to create a chaotic sound. Hurricanes produce winds of at least 74 miles per hour, so the wind would surely get even stronger as the storm grew nearer. Terrance's parents were listening to the radio. The National Weather Service was issuing a hurricane warning for the area and advised anyone within reach of the storm to take cover immediately. Terrance took one last glance at the swirling gray clouds before his father closed the storm shutters over the windows. His mother closed all the doors, and the family moved into the hallway, where there were no windows and the walls were the strongest.

Terrance could hear the wind howling against the sturdy frame of their cottage. In the hallway, they continued listening to the battery-operated radio. The announcer was talking about the formation of hurricanes.

In order for a hurricane to form, there must be pre-existing thunderstorms. These thunderstorms combine to form a larger storm by feeding off warm ocean waters (of at least 80°F). Light winds above the storm are also a necessary condition for the formation of a hurricane. When wind speed reaches 74 mph and above, the storm becomes classified as a hurricane. If the wind speed is below 38 mph, the storm is classified as a **tropical depression**. Storms with wind speeds of 39-73 mph are called **tropical storms**. The storm clouds of a hurricane circulate in a counterclockwise\* rotation around an eye in the center of the storm.

The broadcaster informed listeners that although this storm was indeed a hurricane, it was dying down. As hurricanes pass over cooler and drier areas, they begin to weaken. Passing over land usually turns off the hurricane's main source of moisture. Terrance's family was relieved to hear that the hurricane would probably not be too dangerous by the time it reached their cottage.

After the storm had passed, Terrance's family opened the shuttered windows. Bright sunlight streamed in, relieving them of the fear and worry they had felt. Luckily, their cottage had sustained only a few minor damages. Terrance looked out the window. A few small trees had fallen and were blocking part of their driveway. He sighed with relief, thankful that the hurricane was gone for good.

\*They move clockwise in the Southern Hemisphere.

Name \_\_\_\_\_ Date \_\_\_\_\_

**ANSWER THE QUESTIONS ABOUT *THE HURRICANE***

1. What causes hurricanes to form? List 3 causes.

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2. What makes a hurricane different from a tropical depression? What distinguishes it from a tropical storm?

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3. What causes a hurricane to weaken?

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4. What are some of the steps that Terrance and his family take to prepare for the hurricane?

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5. Have you ever been in a hurricane? If you have, write about this below. If you haven't, write about the last time you heard about a hurricane on the news. Where was it? What was its name?

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## **ANSWERS TO *THE HURRICANE***

1. What causes hurricanes to form? List 3 causes.  
*Warm ocean water, wind, and pre-existing thunderstorms*
2. What makes a hurricane different from a tropical depression? What distinguishes it from a tropical storm?  
*A tropical depression has wind speeds under 28 mph; a tropical storm has wind speeds between 28 and 74 mph; a hurricane has wind speeds above 74 mph.*
3. What causes a hurricane to weaken?  
*A hurricane is weakened as it moves inland to drier, cooler areas.*
4. What are some of the steps that Terrance and his family take to prepare for the hurricane?  
*They listen to the radio.*  
*They move the furniture inside.*  
*They close and secure the windows.*  
*They fill the bathtub with water (in case the water service is interrupted).*  
*They close the shutters.*  
*They go into a room with strong walls and no windows.*
5. Have you ever been in a hurricane? If you have, write about this below. If you haven't, write about the last time you heard about a hurricane on the news. Where was it? What was its name?  
*Answers will vary.*