

Name _____ Date _____



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 Earth. 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.

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 large and powerful enough to create dangerous winds, gigantic 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. By this time, his parents had turned on 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. His father quickly unplugged the radio and told Terrance and his mother to follow him into the shelter. Terrance took one last glance at the swirling grey clouds and hurried away from the window.

In the shelter, Terrance could hear the wind howling against the sturdy frame of their cottage. His father had brought the radio with them into the shelter. He plugged in the radio, and they listened to the broadcaster 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 doesn't reach 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 were 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 left the shelter. Bright sunlight streamed through the windows, relieving them of the fear and worry they had felt for so long in the dark, dimly lit basement. 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 loudly, thankful that the hurricane was gone for good.

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QUESTIONS ABOUT HURRICANES

Look over the story again to answer the following questions. Write your answers in the spaces provided.

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

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

3. What causes a hurricane to weaken?

4. In what direction does a hurricane circulate? Around what do the storm clouds of a hurricane revolve?
