

HURRICANES Reading Comprehension

A hurricane, also called a tropical cyclone, is the most powerful storm that forms on Earth. A hurricane forms over warm ocean water. As it grows in size and intensity, its powerful winds begin rotating around a center, like water going down a drain. Because of the physics phenomenon known as the Coriolis effect, hurricanes that form in the Northern Hemisphere feature winds that move counterclockwise, while those that form in the Southern Hemisphere feature winds that move clockwise. In the center of a powerful hurricane (called the eye), air may sink rather than rise, which suppresses cloud formation, leading to calm skies and wind. The eye of a hurricane can be up to 240 miles in diameter but is normally between 20 and 40 miles in diameter. The clouds on the edge of the eye form the eyewall of the hurricane, which typically feature the hurricane's strongest winds, highest clouds, and fiercest precipitation.

When its winds reach 39 miles per hour, it becomes a tropical storm, and as the storm continues to expand and its winds reach 74 miles per hour, it is a hurricane or tropical cyclone where it will receive a name (like Hurricane Katrina). By this time, the massive storm is 50,000 feet high and 125 miles across. Winds from the hurricane can extend hundreds of miles from the center or “eye” of the hurricane, which itself may be 30 miles across. The most powerful hurricanes can sustain winds of over 156 miles per hour. When hurricanes hit land, they cause massive damage, storm surges, major wind damage, rogue waves, and flooding. Once they hit land, however, they quickly weaken as they are no longer being powered by warm ocean water.

1.) Which is NOT true about a hurricane?

- a.) The eye of a hurricane can be up to 240 miles in diameter.
- b.) A hurricane is the most powerful storm on Earth.
- c.) Hurricane winds in the Northern Hemisphere rotate clockwise.
- d.) The eye of a hurricane usually has calm skies.

2.) What is the author's purpose in writing the following sentence:

As it grows in size and intensity, its powerful winds begin rotating around a center, like water going down a drain.

- a.) The author is telling the cause of a hurricane.
- b.) The author is telling the effect of the hurricane.
- c.) The author is embellishing a hurricane.
- d.) The author is making an analogy so the reader understands the idea.

3.) The hurricane's most damaging winds and precipitation occur in...

- a.) the eyewall.
- b.) the passage doesn't say.
- c.) the eye.
- d.) the outer bands.

4.) What does "suppresses" mean in the following sentence:

In the center of a powerful hurricane (called the eye), air may sink rather than rise, which suppresses cloud formation, leading to calm skies and wind.

- a.) increase
- b.) hold back
- c.) heightens
- d.) circle

5.) When hurricanes hit land...

- a.) they return to the ocean.
- b.) they strengthen.
- c.) they turn into tornadoes.
- d.) they quickly weaken.

6.) Which of the following could be considered the THEME of the second paragraph?

- a.) When tornadoes strike
- b.) The science behind hurricane formation
- c.) The power of a hurricane
- d.) Flooding caused by hurricanes

7.) When do hurricanes receive names?

- a.) After they hit land.
- b.) When all of the damage is assessed.
- c.) When winds reach 74 miles per hour.
- d.) When winds reach 39 miles per hour.

8.) Which question is NOT answered in the passage?

- a.) How wide can a hurricane's eye be?
- b.) Why do hurricanes weaken?
- c.) How high does a hurricane get?
- d.) Where did Hurricane Katrina hit?

9.) Because of the Coriolis effect, winds from a hurricane...

- a.) move in one direction.
- b.) move in different directions depending on the season.
- c.) move in different directions depending on the hemisphere.
- d.) are very powerful.

10.) Which of the following could be a title for the passage?

- a.) Wind Speeds of Hurricanes
- b.) Hurricane Katrina
- c.) Why Hurricanes Weaken
- d.) The Basics About Hurricanes