

The Hurricane: Nature's Fury

Every year between _____ and _____ (commonly called hurricane season), hurricanes threaten the eastern and gulf coasts of the United States, Mexico, Central America and the Caribbean. In the Eastern Hemisphere, these same types of storms are called _____ or _____. These huge storms wreak havoc when they make landfall. They can kill thousands of people and cause billions of dollars in property damage when they hit heavily populated areas.

What makes a Hurricane, a Hurricane?

According to the National Hurricane Center, the word "hurricane" comes from the name "Hurican", the Caribbean god of evil.

A hurricane is defined by the following characteristics:

- They are **tropical**, meaning _____.
- They are **cyclonic**, meaning _____.
- They are **low-pressure systems**. _____.
- The winds swirling around the center of the storm have a sustained speed of _____.

How does a hurricane form?

Hurricanes form in tropical regions where there is warm water (at least 80 degrees), moist air, and converging winds. Most Atlantic hurricanes begin off the west coast of Africa, starting as thunderstorms that move out over the warm, tropical waters. A thunderstorm reaches hurricane status in three stages:

- **Tropical depression** – swirling clouds and rain with wind speeds of less than ____ mph.
- **Tropical storm** – wind speeds of ____ to ____ mph.
- **Hurricane** – wind speeds greater than ____ mph.

What are the parts of a hurricane?

Once a hurricane forms, it has three parts:

- **Eye** – _____.
- **Eye wall** – _____.
- **Rain Bands** – _____.

How does a hurricane do its damage?

The damage caused by a hurricane results from a number of aspects of the storm:

- _____ – a big hurricane can dump dozens of inches of rain in just a day or two, much of it inland. That amount of rain can create inland flooding that can totally devastate a large area around the hurricane's center.
- _____ – these winds can cause structural damage. Also they can roll cars, blow over trees and erode beaches.
- _____ – The prevailing winds of a hurricane push a wall of water, called a storm surge, in from of it. If the storm surge happens to synchronize with high tide, it causes beach erosion and significant inland flooding.
- _____ – hurricane winds often spawn tornadoes, which are smaller, more intense cyclonic storms that cause additional damage.

Once a hurricane forms, it is rated on _____. There are five categories in the rating system as illustrated on the paper titled "The Saffir-Simpson Hurricane Scale" in your packet.

When should I be concerned about a hurricane hitting Houston?

There are four weather alerts for tropical storms and hurricanes. Depending on where you are located in proximity to the storm, you may find yourself under one of these alerts:

- _____ – issued when sustained winds from 39 to 73 mph are possible in your area within 36 hours.
- _____ – indicates that the preceding conditions are likely in your area within 24 hours.
- _____ – issued when hurricane conditions, sustained winds greater than 74 mph, are possible in your area within 36 hours.
- _____ – issued when the preceding conditions are likely in your area within 24 hours.