What is a hurricane?

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Hurricanes are large storms. They have strong winds. Their winds blow faster than a cheetah can run. Cheetahs are the fastest animals on land.

The storms start over warm ocean water. They sometimes move over land. Hurricanes can cause floods.

Weather forecasters tell people where a hurricane will go. They also say how strong it will get. The information helps people. They can get ready for a storm before it arrives.

How Are Hurricanes Categorized?

Weather forecasters use The Saffir-Simpson Hurricane Scale. It rates hurricanes. Hurricanes are given a score of 1 to 5.
A Category 1 hurricane is the weakest hurricane. It has winds of 119 to 153 kilometers per hour. This equals 74 to 95 miles per hour. It is faster than a cheetah can run.

A Category 5 hurricane is the strongest hurricane. Winds blow faster than 252 kilometers per hour. That is more than 157 miles per hour. High-speed trains are about that fast.

What Are The Parts Of A Hurricane?

Eye: The eye is the center of the storm. Winds are light. Skies are clear or partly cloudy.

Eye wall: The eye wall is a ring of thunderstorms. It swirls around the eye. The winds are strongest and the rain is heaviest there.

Rain bands: These are the clouds, rain and thunderstorms around the eye wall. They can stretch for hundreds of miles.
How Does A Storm Become A Hurricane?

A tropical storm forms over warm ocean water. Its winds pick up speed. If they get strong enough, the storm can become a hurricane.

What Makes Hurricanes Form?

Scientists do not know why a hurricane forms. They do know hurricanes need warm water and wind.

How Are Hurricanes Named?

There may be many hurricanes at the same time. Names make it easier to keep track of them.
Tropical storms get names. The name stays with the storm. The names are in alphabetical order. Matthew is a huge hurricane in 2016. Before Matthew was Hurricane Lisa. After Matthew is Hurricane Nicole.

**How Does NASA Study Hurricanes?**

NASA is the U.S. agency that studies air and space travel. NASA satellites take pictures of hurricanes. Satellites are spacecraft. They fly around earth. They collect information about clouds, rain and wind. They also measure the temperature of ocean water.

NASA aircraft also gather other information. They fly devices into and over hurricanes.

**How Will NASA Study Hurricanes In The Future?**

NASA is starting a hurricane science team. It will study how hurricanes form. NASA has new satellites and tools.