

Station 5: Hurricanes

What is a hurricane?

A **hurricane** is a tropical low-pressure system with winds blowing at speeds of 119 km/h (74 mi/h) or more—strong enough to uproot trees. Hurricanes are called typhoons when they form over the western Pacific Ocean and cyclones when they form over the Indian Ocean.

How do hurricanes form?

A hurricane begins as a group of thunderstorms moving over tropical ocean waters. Thunderstorms form in areas of low pressure. Near the equator, warm ocean water provides the energy that can turn a low-pressure center into a violent storm. As water evaporates from the ocean, energy is transferred from the ocean water into the air. This energy makes warm air rise faster. Tall clouds and strong winds develop. As winds blow across the water from different directions into the low-pressure center, the paths bend into a spiral. The winds blow faster and faster around the low-pressure center, which becomes the center of the hurricane.

As long as a hurricane stays above warm water, it can grow bigger and more powerful. As soon as a hurricane moves over land or over cooler water, it loses its source of energy. The winds lose strength and the storm dies out. If a hurricane moves over land, the rough surface of the land reduces the winds even more.



Follow Up Questions:

What is a hurricane?

Where does a hurricane get energy to form?

Why do hurricanes slow down when they move from the ocean onto land?

Why do you think hurricanes are more likely to occur near Florida than California?

How could a map of ocean currents help you predict the path of a hurricane?