

HURRICANE. Weather changes in the United States are largely a matter of anticyclones and cyclones, which chase each other across the continent. These cyclones are generally mild, but in the tropics, especially in the West Indies area, cyclones sometimes develop into hurricanes. These are storms with winds over 75 miles per hour and up to more than 150 miles per hour.

Hurricanes leave tremendous damage in their wake. The amount of rain that falls is amazing. In 1911 a hurricane (or typhoon as it is known in that area) poured almost 4 feet of water within 24 hours on Baguio in the Philippine Islands! The approach of a hurricane to land is heralded by a drastic rise in the tide, by erratic barometric behavior, and by thickening cirrus clouds. Cirrostratus clouds are quickly replaced by lower, thicker altostratus and altocumulus clouds. People run for cover when the terrible winds hit, and, if they are wise, they wait out the calm of the hurricane's eye, because after the eye comes the other side of the doughnut-shaped storm. The width of the area of destruction of the hurricane may be as small as 25 miles or, in a few cases, up to 500 miles.

Hurricanes originating in the West Indies or on the Atlantic Ocean tend to move westward, carried by the eastern trade winds. Their forward speed is about 5 miles per hour in the tropics and increases to about 50 miles per hour above 25 degrees north latitude. At about 25 degrees north latitude the prevailing westerlies cause hurricanes to veer northward and northeastward. Low-pressure areas may also draw hurricanes northward. When the hurricane strays from its birthplace in the tropics or travels far inland, it begins to die down. The irregularity of the land cuts the wind's speed, and the lack of water cuts off the necessary moisture supply. If the hurricane remains over the water, it usually has a longer life span; but as it moves northward, it becomes involved with other extratropical storms and consequently loses its hurricane characteristics.

Hurricanes arising in the West Indies may strike the land along the Gulf of Mexico or the states along the Atlantic seaboard. In 1938 a West Indian hurricane struck New England, causing enormous damage and several hundred deaths.



name _____ class _____

team _____ seat _____ date _____

parent signature _____

Describe how Hurricanes develop

• think and search question

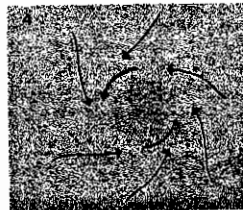
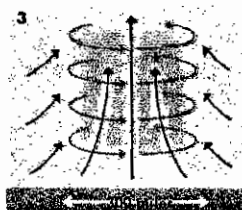
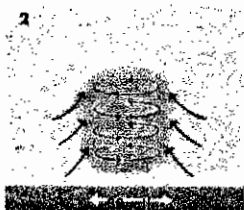
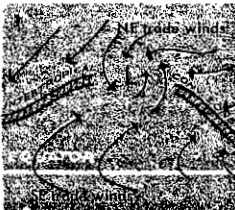
Why does Land cut the power of a hurricane?

• think and search question

What kind of damage can a hurricane do?

• think and search

Below is shown how hurricanes develop. 1. Near the Equator air is made to whirl by opposing winds. 2. Hot, moist air rises at cyclone's center. 3. Heat resulting from moisture condensation causes air to rise faster. 4. Air is drawn in from all sides.



Weather Watch

our goal is to gather background information on hurricanes: how they form, what they can do and how they break up.