

Directions for Hurricane Demonstration

A tropical storm gains energy as it moves over warm ocean waters. Once it reaches land and begins to cross over the land, the energy begins to weaken but often not until it has caused severe damage to property, people and animals. The damage is usually caused by high winds as well as storm surges and floods as a result of the high winds. A tropical storm becomes a hurricane when the winds reach at least 74 miles per hour. The rotation of the water in this simulation represents the winds of a hurricane and how they pick up speed as they rotate across the water.

Directions: Gather the materials needed for your group and follow the directions:

Materials needed for your team:

- newspapers to protect working area from water and food coloring spills
- Clear 4-quart capacity container with water
- several drops of red or blue food coloring for each team
- instrument to stir the water

Directions:

1. Cover your working space with newspaper.
2. Fill a container with about four quarts of water. The water represents the winds of a hurricane.
3. In the Northern Hemisphere, hurricanes move in a counter clockwise direction. Using the stirring instrument, begin stirring counter clockwise slowly until you get the water moving in a counterclockwise circle.
4. As a team member stirs the water, another team member should carefully drop two or three drops of food coloring into the water.
5. Observe the rotation of the water.
6. As a group write a short paragraph explaining the observations of your group.

