The Structure of a Hurricane

Go to the website below:

http://www.srh.noaa.gov/jetstream/tropics/tc.html

Directions:

Go to each of the sections listed below on the NOAA website. Answer the questions and follow the directions for each section.

Tropical Cyclone Introduction

1. What type of system is a hurricane? A hurricane is a low pressure system.
2. Why do hurricanes form near the tropics? Hurricanes must have very warm (near 80 degrees F) ocean water to a depth of about 150 feet. This occurs only in the tropics and subtropical areas on Earth.
3. What does a hurricane need in order to form other than warm ocean water?
    - disturbance in the atmosphere
    - low vertical shear between the levels of the atmosphere
    - relatively moist air in the troposphere
    - generally at least 300 miles from the equator (so the Coriolis effect gives the air some spin)

Watch the video of Hurricane Wilma.

1. What do you notice about Hurricane Wilma as it travels up the east coast of the United States? Why do you think that happens?
   Students should see that Hurricane Wilma starts to fall apart as it enters the cooler waters going up the east coast of the United States.
2. How do tropical cyclones help Earth?
   Cyclonic storms help to redistribute Earth's heat from the tropical regions of Earth to the polar regions.

Tropical Cyclone Structure

Draw a hurricane in your notebook. Label the eye, eyewall, and rainbands on your drawing. Write 3 facts about each of those parts of the hurricane.

Tropical Cyclone Classification

What is the difference in a cyclone, hurricane, and typhoon?

The only difference is the name of the storm. The storms are all the same, but are called different names in different regions on Earth.