

ACTIVITY

What Could A Hurricane Do To My Home?

This activity will answer the question: Will global climate change intensify the effects of hurricanes on coastal areas?

MATERIALS

- Map of the Atlantic and Gulf U.S. coasts that includes the Gulf Stream:
<http://www.erols.com/gulfstrm/>
<http://www.erols.com/gulfstrm/allgulf.htm>
- Class map, a topographic map of the fictional coastal community, Seaside (Appendix D)
- Tide chart for Seaside:
<http://www.catalina.org/goodies/tides.htm>
Use chart for Portland, Maine.
- Construction paper
- Pencils
- Computers with Internet connection
- Student activity sheets

PROCEDURE

Step 1

Ask students to give their definition of a hurricane. What does a hurricane need to “feed” it? Students can look up answers from the list of Web Sites in the Suggested Reading section. Students can also use the Hurricane Activity listed in the Suggested Reading section as an

introduction to this lesson. Guide the students into developing an accurate definition.

Step 2

Show students a map of the East Coast of the United States that includes the Gulf Stream. Using the information in the Prerequisite Knowledge: Teacher section, explain hurricanes, the hurricane season, and how it is affected by the Gulf Stream.

Step 3

Explain how a storm surge forms and the damage it can cause (see Figure 1). To further understand the extent of damage caused by a storm surge, use the Hurricane Andrew storm surge activity at:
<http://octopus.gma.org/surfing/weather/index.html>.

For purposes of this activity, imagine that the storm surge from a hurricane is 15 feet above a normal high tide.

Step 4

Using historical data from the National Hurricane Center Tropical Prediction Center, <http://www.nhc.noaa.gov>, have students compare the 10 deadliest and the 10 most expensive hurricanes to strike the Gulf and East Coasts of the United States. Students fill in the answers to Questions 1 through 3 on the *Student Activity Sheets*.

Figure 1. Storm Surge

