

Hurricane Season

Hurricanes are large tropical storms that form over warm ocean waters. Hurricanes have wind speeds greater than 75 miles (121 km) per hour, cause heavy rains and thunderstorms, and can be hundreds of miles across. These large, powerful storms occur between the latitudes of approximately 5° and 30° in both the Northern and Southern Hemispheres. However, they are called hurricanes only in North America. In Asia and the western Pacific, they are called typhoons or cyclones. Scientists who study hurricanes try to predict when and where these dangerous storms will form so they can warn people who might be in the hurricane's path.

In this activity you will analyze the occurrence of some deadly Atlantic hurricanes. In North America, hurricanes form at a certain time of the year. You will identify this hurricane "season" by using the information in the table on the following page to make a graph. Then you will analyze the relationship between the hurricane season in North America and the tilt of Earth on its axis and the effect of this tilt on temperatures. Follow the steps below to complete the exercise.

YOU ARE THE GEOGRAPHER

Look at the information in the table showing the names and approximate dates of some deadly Atlantic hurricanes. These hurricanes represent a sampling of some of the deadliest hurricanes that occurred in North America between 1950 and 2000.

1. Use the information in the table to make a graph. The graph has been started for you. These two lines will be the two sides of your graph. Just below the bottom line, label the 12 months of the year from left to right. You can use the abbreviations Jan., Feb., Mar., Apr., May, Jun., Jul., Aug., Sep., Oct., Nov., and Dec. Just to the left of the other line, write the numbers 1–10 from the bottom to the top. Now use the information in the table to count the total number of hurricanes that occurred in each month. Show this information on your graph by drawing a line above the months that had hurricanes up to the appropriate number. For example, three hurricanes occurred in October, so you would draw a line above the month of October until it is even with the number 3. When you are done, write the title *Some Deadly Atlantic Hurricanes, 1950–2000* at the top of the graph.

2. Analyze your graph. In which months did hurricanes occur? Of these, which month had the greatest number of hurricanes? In which months were there no hurricanes? Based on your graph, when do you think hurricane season in North America is?

3. Find a diagram in your textbook or in an atlas showing how Earth is tilted on its axis and revolves around the Sun, causing seasons. Compare the timing of the hurricane season in North America to the information in the diagram. What do you notice? During which seasons do hurricanes occur? Why do you think that is? What effect do you think Earth's tilt is having on ocean waters at this time?

4. In the Southern Hemisphere, the seasons are reversed. For example, when it is summer in the Northern Hemisphere between June and September, it is winter in the Southern Hemisphere. Based on this fact and on the graph you created, when do you think hurricane season in the Southern Hemisphere is? Explain your answer.

Some Deadly Atlantic Hurricanes, 1950–2000

Hurricane Name	Approximate Dates	Hurricane Name	Approximate Dates
Agnes	June 19–22, 1972	Diane	August 16–19, 1955
Alberto	July 4–7, 1994	Donna	September 4–5, 1960
Allen	August 4–7, 1980	Fifi	September 14–19, 1974
Alma	June 4–8, 1966	Gilbert	September 9–14, 1988
Andrew	August 23–27, 1992	Gordon	November 8–21, 1994
Betsy	September 7–10, 1965	Hazel	October 5–13, 1954
Bret	August 7–11, 1993	Hattie	October 26–31, 1961
Cesar	July 25–28, 1996	Hilda	September 11–16, 1955
Charlie	August 15–20, 1951	Hugo	September 17–22, 1989
Cleo	August 22–26, 1964	Janet	September 22–28, 1955
Dora	September 12, 1956	Joan	October 14–22, 1988

A large, empty rectangular box with a thin black border, occupying most of the page. It is intended for the student to write or draw their response to the hurricane season topic.