

Lab: Hurricanes

COORDINATED SCIENCE 1

Background: Hurricanes are violent storms that form over water in the zone of the **Trade Winds**. They produce strong winds, high seas, and heavy rain and if they reach land do great damage. When winds reach an intensity of 63 to 177 kilometers per hour, the disturbance is called a **tropical storm**. But when winds exceed 117 kilometers per hour, the disturbance is called a **hurricane** if it is in the Atlantic Ocean, Caribbean Sea, or Gulf of Mexico. The term hurricane comes from an American Indian word that means “big wind”. If this type of storm forms in the North Pacific, it is called a **typhoon**.

The U.S. Weather Bureau begins reporting a hurricane watch when a hurricane reaches a position where it appears likely to endanger land areas. The watch begins a few days before the hurricane is expected to reach land. This gives people an opportunity to take the necessary steps to protect their lives and property. **Hurricane warning** means that all precautions should be taken immediately because your area is expected to be in the path of the hurricane. Hurricanes sometimes take unexpected course changes, which makes them especially dangerous

Purpose: In this activity, you will plot the paths of two separate hurricanes. When you are finished you will be asked to compare the two paths and answer the Conclusion Questions

Procedure:

1. On the hurricane tracking chart attached, plot the path of **Hurricane Doria** for each day. Plot the path with a red pencil. Use the data in **Table 44-1**
2. On the same hurricane tracking chart, plot the path of **Hurricane Betsy** for each day. Plot the path with a blue pencil. Use the data in **Table 44-2**
3. Compare the **paths** of the two hurricanes and answer the **Conclusion Questions**.

Conclusion Questions:

1. **Where** did **Betsy** hit land?
2. **Where** did **Doria** hit land?
3. In which general direction, **north** or **south**, do hurricanes move?
4. **Why** do you think hurricanes form over water?

5. Which **areas** of the United States are in the **most danger** from hurricanes?

6. What do they call a hurricane in the **North Pacific**?

7. At what **speed** do the winds have to be in order to be considered a hurricane?

8. What do they call the storm is the winds are between **63 and 117 kilometers per hour**?

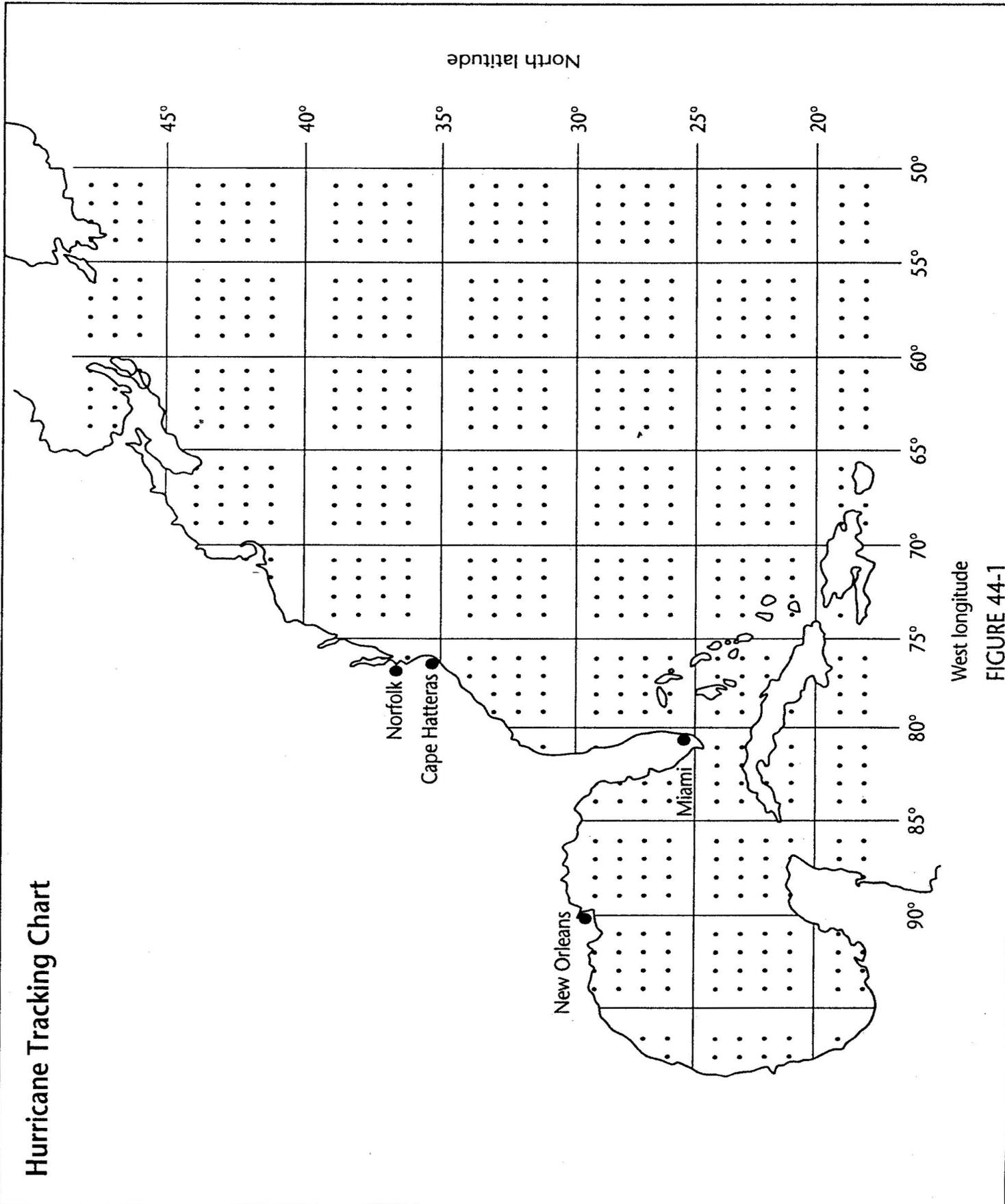
Table 44-1. Hurricane Doria

Date (September 1967)	Position (at 7 A.M.)	
	Latitude	Longitude
9	27.5°N	79°W
10	30.5°N	77.5°W
11	36°N	71°W
12	36°N	66°W
13	36.5°N	64.5°W
14	37.5°N	65.5°W
15	38.5°N	68°W
16	38°N	74.5°W
17	36°N	76°W

Table 44-2. Hurricane Betsy

Date (August–September 1965)	Position (at 7 A.M.)	
	Latitude	Longitude
29	19.5°N	63.5°W
30	22.5°N	65.5°W
31	23°N	66.5°W
1	21°N	67°W
2	23.5°N	70°W
3	26°N	73°W
4	28°N	75°W
5	28.5°N	76°W
6	29.5°N	76°W
7	25.5°N	78°W
8	25.5°N	81°W
9	26.5°N	87°W
10	29.5°N	90.5°W
11	33°N	92°W

Hurricane Tracking Chart



West longitude

FIGURE 44-1

