










CHALLENGE

What information is found on a weather map? How can a weather map be used to forecast weather?

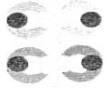
| MATERIALS | |
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|  | <p>For each student</p> <ul style="list-style-type: none"> 1 Student Sheet 69.1, "Summarizing Weather Reports" 1 Student Sheet 69.2, "Map of Iowa" |

PROCEDURE

1. Work with your group to review the information in the table below, "Weather Map Symbols." Make sure that you are familiar with the different weather symbols and what they mean.

| Weather Map Symbols | | |
|---------------------|---|---|
| Weather | Symbol | Associated Weather |
| Precipitation |  | Rain, snow, fog, or other forms of precipitation |
| Cold front |  | Cooler temperatures, possible precipitation |
| Warm front |  | Warmer temperatures, possible precipitation |
| Low pressure |  | Cloudy skies, possible precipitation |
| High pressure |  | Clear skies |
| Hurricane |  | Damaging winds, rain, possible flooding |
| Tornado watch |  | Area where tornadoes may occur, possible severe thunderstorms |
| Tropical storm |  | Very strong winds and heavy rains |

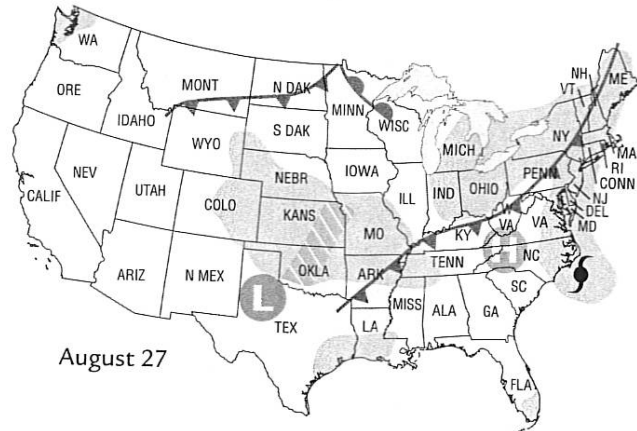
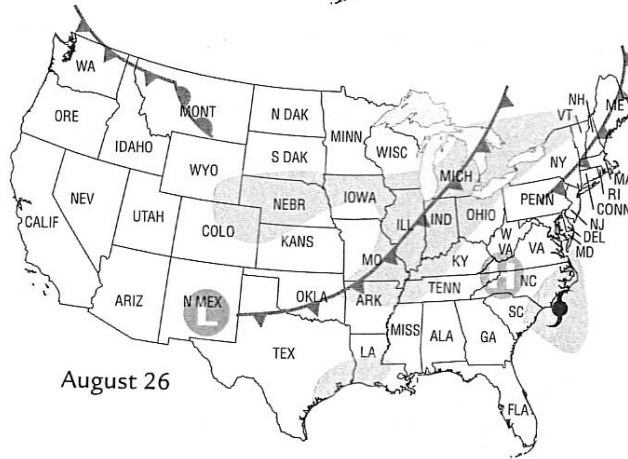
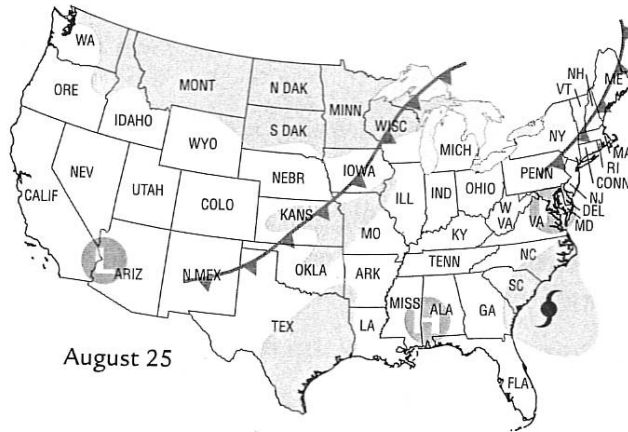
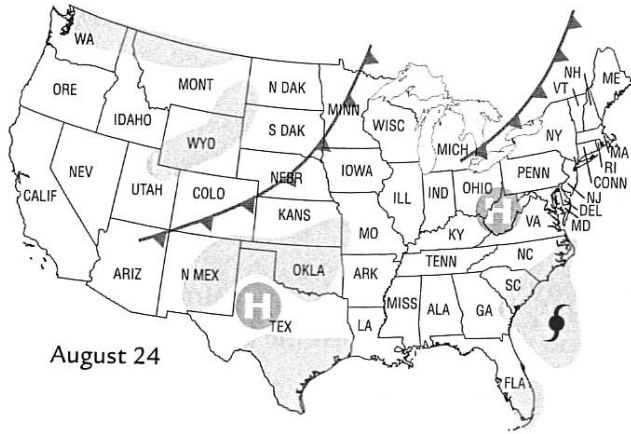
ANALYSIS



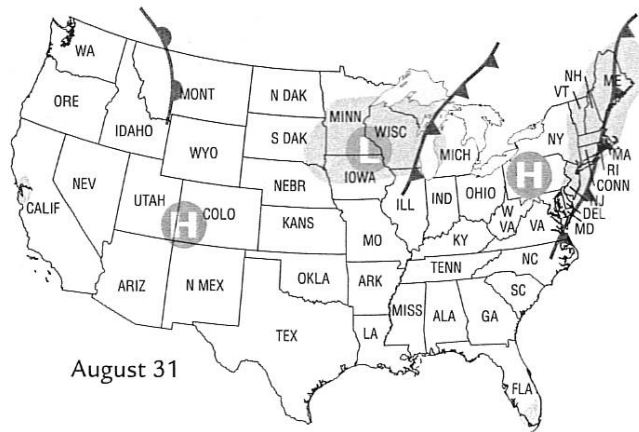
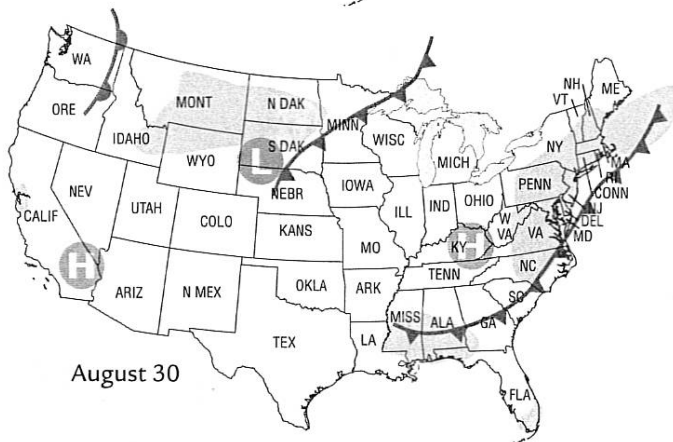
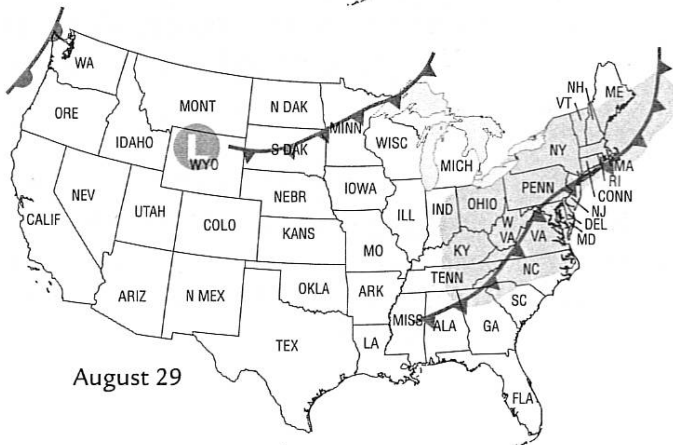
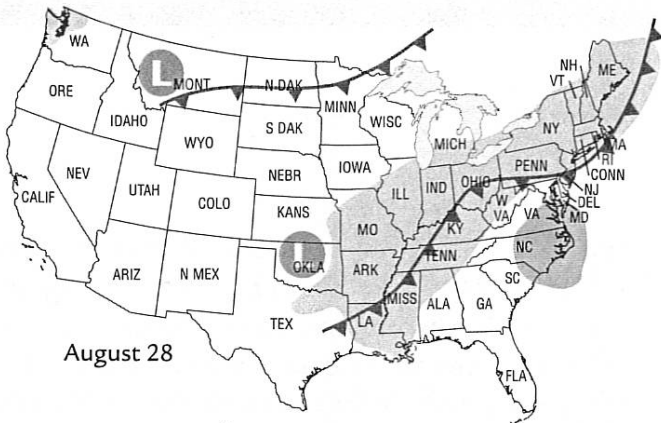
1.
 - a. Based on the patterns you observed in the weather maps, in what direction does weather generally travel across the United States?
 - b. Think back to your work in the last activity. In what direction does the prevailing wind move across the United States?
 - c. How does the movement of the atmosphere globally affect weather locally?
2. Below is weather data collected for Iowa on September 15. Your teacher will give you Student Sheet 69.2, "Map of Iowa." Use the information provided and your knowledge of weather maps to place the appropriate weather symbols on Student Sheet 69.2. Be sure to construct a key for your map.
 - Warm front extending from Lincoln, Nebraska northeast to Mason City, Iowa
 - Rain all along the warm front
 - Low-pressure system in and around Des Moines, Iowa
3. **Reflection:** People often complain about the unreliability of weather forecasts. Why do you think meteorologists are sometimes wrong about what the weather will be like?

Activity 69 • Forecasting Weather

Weather Maps: August 24
through August 31



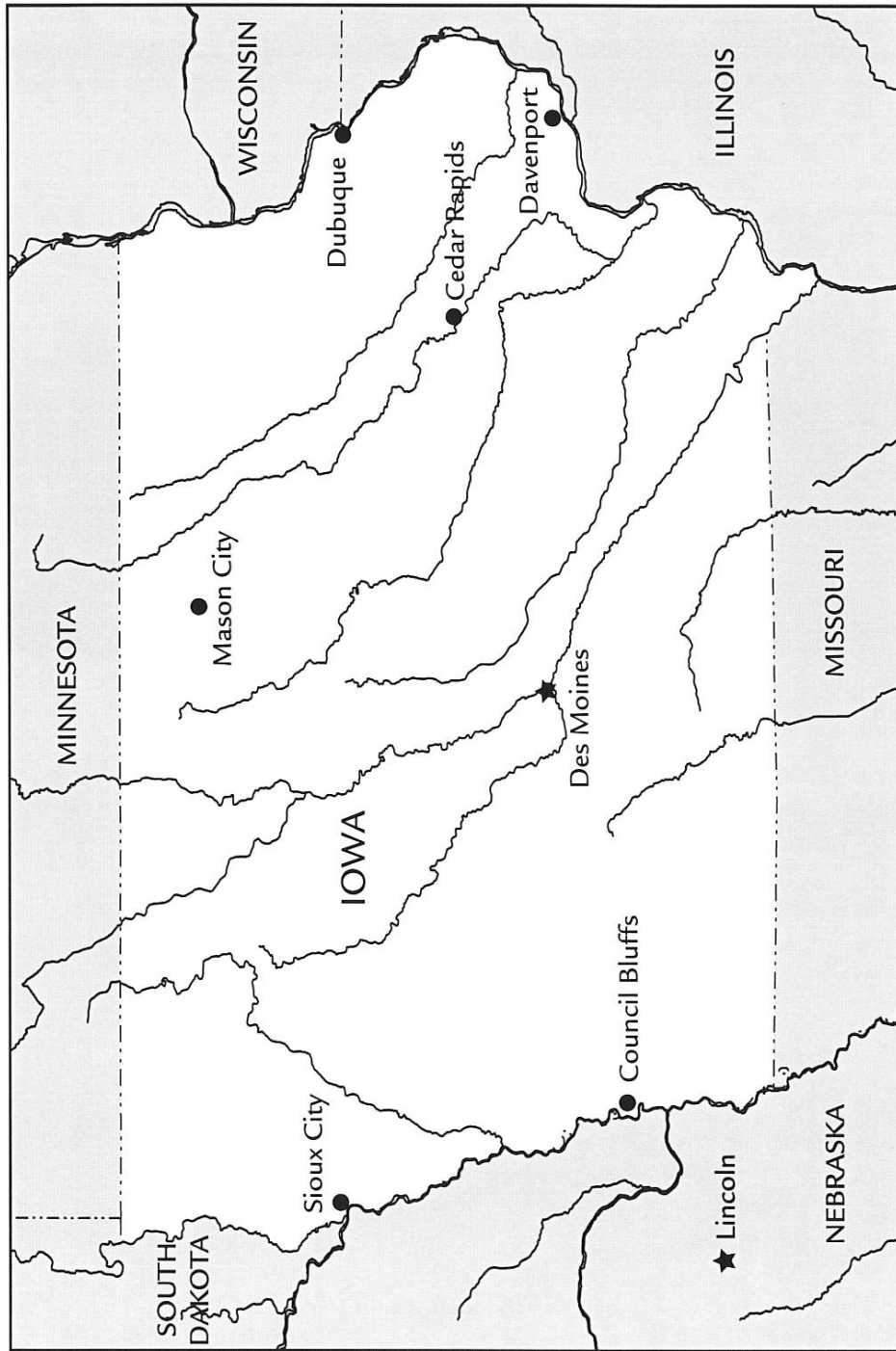
Forecasting Weather • Activity 69



Name _____

Date _____

Map of Iowa



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