

Name \_\_\_\_\_ Date \_\_\_\_\_

## Activity 3.2.2

### Interpreting Weather Symbols—the visual language of weather

#### Objectives

To decode symbols appearing on a surface weather map and describe weather conditions at various locations on the map.

#### Materials

- Student Worksheet 3.3.1 Weather Symbols
- Student Worksheet 3.3.2 Interpreting Weather Symbols—the visual language of weather (this sheet)
- atlas or other U.S. maps showing major cities
- pencil
- current U.S. weather map

#### Procedure

1. Look at the current U.S. weather maps and review Activity 3.3.1 and 3.3.2 worksheets.
2. Use the symbol key on 3.3.1 to determine the current surface weather conditions reported at each city on the list.

Rules for representing current conditions on a surface weather map:

- Each surface station is designated as a circle on the weather map.
- Current temperature in degrees Fahrenheit is displayed at the 11 o'clock position.
- Dew point is displayed at the 8 o'clock position.
- Precipitation type is displayed at the 9 o'clock position.
- Air pressure, reported to the nearest tenth of a millibar, is displayed at the 1 o'clock position. To read the air pressure, place a decimal point between the second and third number. Then add a 9 or 10 to the left so the resulting air pressure falls between 960 mb and 1050 mb.
- Wind direction is displayed as a shaft extending out from the circle and pointing in the direction from which the wind blows.
- Wind speed is displayed by the number of feathers or a pennant drawn on the clockwise side of the shaft.
- Sky coverage is displayed by the percentage of the circle that is shaded in.

3. Fill in the blank spaces next to each city with the correct values.

For the following cities: Atlanta, Chicago, Dallas, Denver, Miami, Minneapolis, New York, San Francisco, Seattle, Washington—and your location if not listed!

CITY	STATE	TEMP.	DEW POINT	WIND SPEED	WIND DIRECTION	AIR PRESSURE	CLOUD COVER
Atlanta	GA						
Chicago	IL						
Dallas	TX						
Denver	CO						
Miami	FL						
Minneapolis	MN						
New York	NY						
San Francisco	CA						
Seattle	WA						
Washington	DC						
OUR TOWN							

In your WEATHERlogs, answer the following questions:

4. Which city is recording the highest current temperature?
5. Which city is recording the lowest current temperature?
6. Describe the location(s) of high pressure centers and low pressure centers.
7. Describe the direction of wind circulation around any high pressure centers.
8. Describe the direction of wind circulation around any low pressure centers.
9. Describe the location(s) of warm fronts, cold fronts, stationary fronts, or occluded fronts.
10. Which areas of the U.S. are receiving precipitation? Where is the heaviest precipitation occurring?
11. Locate the nearest surface reporting station near your school. Describe the weather conditions at that station.