Name: _____ Date: _____ Hour: _____

High and Low Pressure Systems

Starter: Look outside today. What kind of air mass are we being affected by in St. Clair Shores? How do you know? What kind of front passed through?

High Pressure Systems

Side View

Top (Bird's Eye) View

- Air _____ and _____ to lower pressure areas
- Turns _____ Size: _____
- Speed: _____ Weather: _____

Low Pressure Systems

Side View

Top (Bird's Eye) View

- Air _____ to higher altitudes.
- Turns _____ Size: _____
- Speed: _____ Weather: _____
- Sometimes a low pressure system forms between a _____ and _____ air mass.

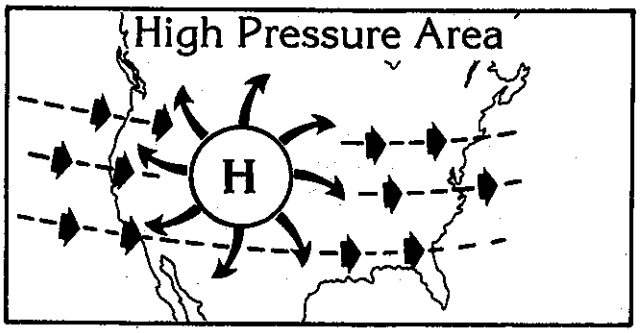
Visual (Page 84)

1. Locate the H and L on the map. What is different about these areas?

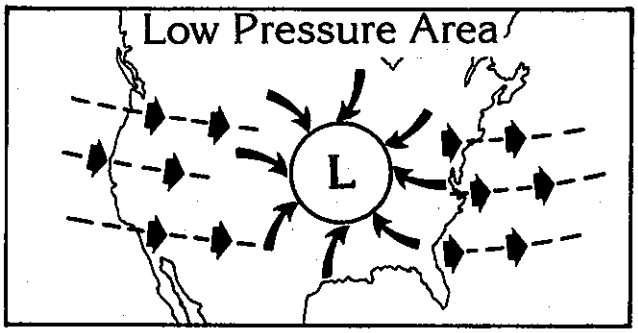
2. With your finger, trace the motion of air, starting above the high. Where have you seen similar patterns in earlier chapters?

Highs and Lows

Highs and lows are due to the unequal heating of air masses.



Winds blow outward, clockwise; air pressure is highest at center; it usually brings clear skies and fair, cool weather.



Winds blow inward toward center, counterclockwise; air pressure is lowest at center; it usually brings cloudy skies, precipitation, and warm weather.

1. Write high if the condition is caused by a high pressure area; write low if it is caused by a low pressure area.

   _____ a. bright blue skies

   _____ b. a five-inch snowfall

   _____ c. highest air pressure at the center

   _____ d. hot, damp weather

   _____ e. crisp, cold temperature

   _____ f. rainstorm in Florida

   _____ g. bright sunlight and cloudless skies in Oregon

2. In what direction do high and low pressure areas travel in the United States? from _____ to _____

3. What is the cause of high and low pressure areas? _____

   _____

4. Do cold air masses have higher or lower air pressure than warm air masses? _____

   Explain your answer. _____

   _____