



Review and Reflect

Review

1. What kinds of information were plotted on the weather maps that you investigated?
2. Use your observations of the two bottles of water in Part B of this investigation to explain what happens when a cold air mass meets a warm air mass. Which air mass is likely to rise? Which air mass is likely to stay near Earth's surface?
3. What evidence did you obtain from your investigation that shows that air pressure decreases with altitude?

Reflect

4. What do weather maps tell you about the weather now and in the future?
5. What evidence of relationships were you able to find between cloud patterns and precipitation?
6. What evidence of relationships were you able to find between cloud patterns and high- and low-pressure systems?

Thinking about the Earth System

7. On your *Earth System Connection* sheet, note how the things you learned in this investigation connect to the different Earth systems.
 - a) Describe how air pressure (atmosphere) is related to elevation (geosphere).
 - b) Describe how air masses (atmosphere) are related to the regions over which they form (geosphere or hydrosphere).

Thinking about Scientific Inquiry

8. What weather data did you use to look for relationships in this investigation?
9. How did you use mathematics in this investigation?
10. Give an example of how you used evidence to develop ideas in your investigations into weather.