## Weather Orientation:

Complete the following with <u>organized</u>, <u>thorough</u>, and <u>meaningful</u> responses. Use diagrams with captions. Tables, Venn diagrams, or other graphic organizer may also be appropriate.

- Identify each layer of Earth's atmosphere and characteristics for each layer. Clearly identify which layer(s)
  weather occurs
- 2. What happens to all of the Sun's radiation as it encounters Earth?
- 3. Explain radiation, conduction, convection.
- 4. Explain the role of the Earth's atmosphere in regulating temperature.
- 5. How does the curve of the earth affect how the Sun's rays are received at different locations?
- 6. How does the spinning of the Earth affect global winds?
- 7. Describe the following (use diagrams):
  - Doldrums Westerlies Polar Easterlies Trade Winds Land Breeze Sea Breeze
- 8. Use Figure 2, page 455 to explain how temperature can affect air pressure and wind.
- 9. Use Figure 3, page 456 to explain the relationship between temperature and humidity.
- 10. Use Figure 8, page 460 to explain the conditions necessary for various types of precipitation.
- 11. Use Figure 9, page 462 to describe the six major air masses that affect the Northern Hemisphere.
- 12. What is the connection between atmospheric pressure and wind direction?
- 13. Identify and describe the four types of fronts.