**Chapter 6 Section 3 Global Winds and Local Winds**

Read pages 160-165 and complete these questions below on **notebook page 79.**

**Part 1-Read pages 160-162**

1. What is **wind**?
2. What causes differences in air pressure?
3. Why is air at the equator warmer and less dense than surrounding air?
4. What characteristics does air at the poles have?
5. What type of pressure is associated with cold air?
6. What are ***convection cells***?
7. What are ***pressure belts***?
8. Explain how the Coriolis Effect impacts global winds.

**Part 2-Read pages 162-163….. Know your Global Winds**

1. Describe the Polar Easterlies
2. Describe the Prevailing Westerlies
3. Describe the Trade Winds
4. Describe the Doldrums
5. Describe the Horse latitudes
6. Diagram figure 4 on page 163 into your notebook
7. Looking at this diagram, analyze which global winds affect most of the continental United States weather?
8. What are the jet streams?
9. Why is locating the jet streams of particular importance to pilots and meteorologists?

**Part 3-Read pages 164-165 Know your Local Winds**

1. What are local winds?
2. What is the cause of a local wind?
3. Why does wind blow from water to land during the day?
4. Why does wind blow towards the water at night?
5. How does air flow on a mountain during the day?
6. Why does wind tend to blow down from the mountain at night?
7. Diagram figure 6 on page 164 into your notebook.
* **Now complete your summary-2-3 sentences (use the summary on page 165 as a reference).**

**Chapter 6 Section 4 Air Pollution**

Read pages 166-168 and complete the questions below on **notebook page 81.**

1. What is air pollution?
2. What are primary pollutants?
3. Name some examples of primary pollutants.
4. What are secondary pollutants?
5. Name some examples of secondary pollutants.
6. How does smog form?
7. Diagram Figure 2 on page 167 into your notebook.
8. What is a major source of human caused air pollution?
9. Name some sources of indoor air pollution.

**Part 2 –Read pages 169-172 then continue to answer the following questions on notebook page 81**

1. What is acid precipitation?
2. What is acidification?
3. Why is acidification detrimental to plant life?
4. Why is acidification dangerous to aquatic life?
5. What is acid shock?
6. What are communities doing to prevent acid shock in lakes?
7. What alarming discovery was made by scientists in 1985?
8. What chemical do scientists feel was responsible for creating the ozone hole?
9. What dangerous effects result from the hole in the ozone?
10. How long will it take the ozone to recover?
11. Name three ways air pollution is being reduced?

**\*Now Use the summary on page 173 as a guide to help you write a 2-3 sentence summary about the material in this section.**