**APES Chapter 7: Atmosphere, Climate, and Biomes**

**Note Taking Focus Questions**

**Directions:** Use the Cornell Method of note taking as you answer the questions below. Your notes must be **hand written** to receive credit for them. Within your notes, use the title for each subsection of notes which is *in italics and underlined.*

**Section 7-1**

*Weather vs. Climate*

1. Define the term weather and list what it would include.

2. Define the term climate.

3. How are weather and climate different?

*Surface Ocean Currents*

4. What are surface ocean currents, what causes them, and what do they help to determine?

5. How do air circulation patterns and ocean currents impact climate?

*Factors Affecting Air Circulation in the Lower Atmosphere*

6. List and describe each of the 3 factors that affect air circulation in the lower atmosphere.

*Circulation of Ocean Currents*

7. What 2 things help to create ocean currents?

8. Explain what causes the ocean conveyor belt and what impact it has.

9. Explain how the ocean and atmosphere are strongly linked.

10. What 3 things lead to an irregular distribution of climate and the resulting biomes?

*Greenhouse Gases Warm the Lower Atmosphere*

11. List the 4 major greenhouse gases.

12. Explain what greenhouse gases do, and what the greenhouse effect is.

*Surface Features Affect Local Climates*

13. Explain how the two surface features mentioned in the book affect local climate.

**Section 7-2**

*Major Biomes*

1. Climate and vegetation vary due to what 2 factors?

2. Define the term biome.

3. Read the remainder of section 7-2 and take notes on each of the major biomes described. Your notes should include where the biome is typically found, climate conditions, types of plants and animals found there.

*Staying Alive in the Desert: Science Focus 7.1 p. 152*

4. What adaptations do desert plants have to help them survive the harsh conditions in the desert?

5. What adaptations do desert animals have to help them survive the harsh conditions in the desert?

*Mountains Play Important Ecological Roles*

6. Why to mountains often have a variety of biomes on them?

7. Why do they tend to be islands of biodiversity?

8. Describe some of the important ecological roles that mountains play.

9. How do mountains play a critical role in hydrologic cycles?

**Section 7-3**

*Major Human Impacts on Terrestrial Ecosystems*

1. What % of terrestrial ecosystems are being degraded or used unsustainably?

2. Use figure 7-17 to summarize the impact that humans are having on the 4 biomes listed in the figure.

3. What can cause the location and size of biomes to change? What would be the impacts of those changes?