

Chapter 5 – Review Questions

Read Chapter 5 and answer the following questions on a separate sheet of paper.

ANSWERS MUST BE HANDWRITTEN! Typed responses will not be accepted.

1. How does wind affect climate, global distribution of nutrients, and pollution?
2. What is *climate*? What two main factors determine a region's climate?
3. What are four factors that affect global air circulation? What effect does each of these factors have?
4. How do warm and cool ocean currents form? How do oceans affect regional climates?
5. What are *greenhouse gases*? List four greenhouse gases.
6. What is the *greenhouse effect*, and how does it affect the earth's climate?
7. What is the *rain shadow effect*, and how can it affect the climate on each side of high mountains? What causes *monsoons*? How do urban areas create *microclimates*, and how do they differ from surrounding climates?
8. What is a *biome*? What two factors determine whether an area of the earth's surface is tropical, temperate, or polar, and is desert, grassland, or forest? How do climate and vegetation vary with latitude and altitude?
9. What is a *desert*? What are the three major types of desert, and how do they differ in climate and biological makeup? List two ways in which desert plants survive heat and a lack of water. Do the same for desert animals. Why are desert ecosystems vulnerable to disruption?
10. What is *grassland*? What are the three major types of grassland, and how do they differ in climate and biological makeup? Distinguish between *arctic tundra* and *alpine tundra*. Why are grasslands vulnerable to disruption? What is *chaparral*, and what is the importance of fire in this biome?
11. What is a *forest*? What are the three major types of forest, and how do they differ in climate and biological makeup? Distinguish among *tropical rain forests* and *tropical deciduous forests*.
12. Why are tropical rain forests especially important for the earth's biodiversity? What are the drawbacks of clearing these forests to grow crops?
13. Why are *mountains* ecologically important? What factors make them vulnerable to ecological disruption?
14. For each of (a) deserts, (b) grasslands, (c) forests, and (d) mountains, list four types of human activities that have harmful impacts.