**Unit 4 Review Sheet: Water, Air, and Land**

Chapters 11-15

**Review Questions** Complete on your own paper using complete sentences

Unit 4A: Chapter 11: Water

*Section 11-1: Water Resources*

1. Describe how Earth’s water resources are distributed.
2. Explain why fresh water is one of Earth’s limited resources.
3. Where can most of the Earth’s freshwater be found?
4. Describe how Earth’s surface water is distributed.

*Section 11-2: Water Use and Management*

1. How is water used globally?
2. Explain how water is treated so that it can be used for drinking.
3. Describe how water is used in homes, in industry, and in agriculture.
4. How are dams and water diversion projects used to manage freshwater resources?
5. List five ways that water can be conserved. What is the cheapest solution to having more fresh water for everyone to use?
6. How can water supply to a certain area be increased?
7. What is the main reason for the dispute over water in the Chattahoochee River? What 3 states are involved in the water wars?
8. What could cause conflict between 2 countries that share a river?

*Section 11-3: Water Pollution*

1. Contrast point-source pollution and nonpoint-source pollution.
2. Give two examples of point-source pollutants.
3. Give two examples of nonpoint-source pollutants.
4. What are the five types of water pollutants?
5. Explain why groundwater pollution is difficult to clean up.
6. Why do organisms die in eutrophic lakes?
7. Describe the major sources of ocean pollution.
8. Describe the major laws designed to improve water quality in the United States.

Chapter 12: Air

*Section 12-1: What Causes Air Pollution*

1. Name five primary natural air pollutants and give sources for each.
2. Name and describe examples of secondary pollutants.
3. What are pollution control devices? Name an example.
4. Name the two major sources of air pollution in urban areas. What is MOST human air pollution produced by?
5. Describe how smog forms.
6. Explain thermal inversion.
7. What is the most deadly form of indoor pollution?
8. Describe the Clean Air Act of 1970. What does it require?

*Section 12- 2: Air, Noise, and Light Pollution*

1. Describe three short-term effects of air pollution on human health.
2. Describe three long-term effects of air pollution on human health.
3. Explain what causes indoor air pollution and how it can be prevented.
4. Describe the human health problem caused by noise pollution. At what decibel does sound begin to cause problems for humans?
5. Describe two solutions to energy wasted by light pollution.

*Section 12- 3: Acid Precipitation*

1. What causes acid precipitation?
2. Explain how acid precipitation affects plants, soils, and aquatic ecosystems.
3. Describe three ways that acid precipitation affects humans.
4. Describe three ways that countries are working together to solve the problem of acid precipitation.

Chapter 13: Atmosphere and Climate Change

*Section 13-1: Climate and Climate Change*

1. Contrast weather and climate.
2. Identify four factors that determine climate.
3. Why does latitude strongly influence climate?
4. How do oceans affect climate?
5. Explain why different parts of the Earth have different climates.
6. Explain what causes the seasons.
7. What causes wind on Earth?
8. What bands of wind are responsible for the climate in Georgia?

*Section 13-2: The Ozone Shield*

1. Explain how the ozone layer shields the Earth from much of the sun’s harmful radiation.
2. Identify examples of greenhouse gases. Why are they considered greenhouse gases?
3. Explain how chlorofluorocarbons damage the ozone layer.
4. Explain how the ozone hole is forming.
5. Describe the damaging effects of ultraviolet radiation.
6. Explain why the threat to the ozone layer is still continuing today.

*Section13- 3: Global Warming*

1. Explain why Earth’s atmosphere is like the glass in a greenhouse.
2. Why is the carbon dioxide content of the atmosphere increasing?
3. What is one possible explanation for the increase in average global temperature?
4. Describe what a warmer Earth might be like. What are the consequences of a rise in global temperature?
5. What was the Kyoto Protocol?

Unit 4B: Chapter 14: Land

*Section 14-1: How We Use Land*

1. Contrast urban and rural land.
2. Describe three major ways humans use land.
3. What are considered marginal lands?
4. Why are farm lands disappearing in developed countries?

*Section 14-2: Urban Land Use*

1. Describe the urban crisis.
2. Where do most Americans live? Why?
3. Why have people in industrialized countries moved to cities?
4. Define urban sprawl and explain how it affects the environment.
5. Explain the benefits of open spaces in urban areas. What are considered “open spaces”?
6. What is covered under the 1996 Farmland Protection Program?
7. Why is it important to preserve farmland?
8. What are ways to preserve rangelands?
9. What was the first national park established in 1870 and what was its purpose?
10. How are wilderness areas protected from exploitation?
11. Describe the process of urban planning.
12. Describe the heat island effect.

Chapter 15: Food and Agriculture

*Section 15-1: Feeding the World*

1. Identify the major causes of malnutrition.
2. Compare the environmental costs of producing different types of food.
3. Explain how poverty is a major cause of malnutrition.
4. Explain the importance of the green revolution.

*Section 15-2: Crops and Soil*

1. Distinguish between traditional and modern agricultural techniques.
2. What agricultural products require the least amount of energy to raise?
3. What makes soil fertile?
4. Why should we conserve soil?
5. When is erosion most likely to occur?
6. How is the Earth’s arable land being reduced?
7. Explain the benefits and environmental impacts of pesticide use.
8. Explain how genetic engineering is used in agriculture.

*Section 15-3: Animals and Agriculture*

1. Explain how overharvesting affects the supply of aquatic organisms used for food.
2. Describe the current role of aquaculture in providing seafood.
3. Describe the importance of livestock in providing food and other products.