**Unit 5 Review Sheet: Energy and Waste-Environmental Science**

Chapters 17-19

**Review Questions** On a separate paper, answer all parts of the following questions using complete sentences.

Chapter 17: Nonrenewable Energy

*Section 17-1: Energy Resources and Fossil Fuels*

1. Identify examples of nonrenewable energy sources.
2. List at least three factors that influence the value of a fuel.
3. Explain how fuels are used to generate electricity in an electric power plant.
4. Why are fossil fuels still used widely in the US?
5. Explain how fossil fuels form.
6. Identify examples of fossil fuels.
7. List three advantages of fossil fuel use.
8. List three disadvantages of fossil fuel use.
9. Describe environmental effects of petroleum (oil) energy use.
10. Describe at least two factors that influence predictions of fossil fuel production.

*Section 17-2: Nuclear Energy*

1. Describe nuclear fission.
2. Describe how a nuclear power plant works.
3. List at least two advantages of nuclear energy. What is an environmental benefit of nuclear energy?
4. List at least two disadvantages of nuclear energy.

Chapter 18: Renewable Energy

*Section 18-1: Renewable Energy Today*

1. List six forms of renewable energy.
2. Compare the advantages and disadvantages of the following forms of renewable energy: solar, wind, hydroelectric
3. Contrast passive solar heating, active solar heating, and photovoltaic energy.
4. Describe how wind energy is being used today.
5. Describe biomass fuel and explain how it is obtained.
6. Describe how hydroelectric energy, geothermal energy and tidal energy work.

*Section 18-2: Alternative Energy and Conservation*

1. Describe at least two alternative energy technologies.
2. Explain at least one way that hydrogen could be used as a fuel source in the future.
3. Contrast energy efficiency and energy conservation.
4. How can hydrogen be burned as a fuel source? Why is it still considered experimental?
5. Describe two forms of energy-efficient transportation.
6. Identify three ways that you can conserve energy in your daily life. What would increase energy efficiency in the US?

Chapter 19: Waste

*Section 19-1: Solid Waste*

1. Name one characteristic that makes a material biodegradable.
2. What are examples of biodegradable waste?
3. Identify two types of solid waste.
4. What is the difference between plastics and bioplastics?
5. Describe how a modern landfill works.
6. Name two environmental problems caused by landfills.
7. How is methane produced in landfills and why is it a problem?
8. Describe the use of incinerators in reducing the amount of solid waste. What are the problems associated with this method?

*Section 19-2: Reducing Solid Waste*

1. Identify and describe 4 ways you can produce less waste, reducing the amount of material in landfills.
2. What are the benefits of recycling?
3. Explain how you can use your consumer buying power to reduce solid waste.
4. List two benefits of composting. Describe the process of composting.
5. Name one advantage and one disadvantage to producing degradable plastic.

*19-3: Hazardous Waste*

1. Identify examples of hazardous waste.
2. Describe two characteristics of hazardous waste.
3. Describe one law that governs hazardous waste.
4. Describe two ways to treat hazardous waste safely.