

Environmental Science
Mr. Heward
Exam #5 Study Guide

1. List 3 advantages and 3 disadvantages of each of the following automobile fuel sources

- Ethanol

- Biodiesel

- Natural Gas

- Electricity

- Hydrogen

2. Describe how energy is utilized from each of the following sources:

Non-renewable energy sources

- Nuclear

- Coal

- Oil

- Natural Gas

Renewable energy sources

- Wind

- Solar Energy

- Geothermal Energy

- Tidal Power

- Hydroelectricity

3. Diagram a coal-fired power plant

4. Explain the difference between nuclear fission and nuclear fusion

5. How is oil extracted from the ground?

6. Describe the three ways solar energy is used: passive solar heating, active solar heating, photovoltaic cells.

7. Describe the data that would be appropriate for each of the following graphical representations:

- Line graph

- Scatter plot

- Bar graph

- Pie chart

8. List the 5 parts of the cardiovascular system

I

II

III

IV

V

9. List the 6 functions of the cardiovascular system

I

II

III

IV

V

VI

10. Draw and label the parts of a mammalian heart

11. Outline the flow of blood through the cardiovascular system

12. Essay Question:

Global oil production is expected to reach its peak in the next few years. Global oil consumption will likely continue to rise in the future. After peak production is reached we can expect rapidly decreasing supplies and rising costs. There is a lot of interest and research going into alternative fuel sources that could replace oil in the future. What do you think will be the primary automobile fuel in the future? Justify your choice and make sure you respond to each of the following in your essay.

- a) Where will the fuel come from and how will it be delivered?
- b) What will be the long-term sustainability outlook of the fuel?
- c) How will the fuel compare to gasoline in terms of greenhouse gas emissions and impact on global climate change.