**APES Study Guide**

**Science and Sustainability**

Vocabulary:

It is necessary that you know the meaning of the following terms in order to answer application and evaluation questions on your upcoming assessment. You may write out the definition, make notecards (handwritten or digital), use the online vocabulary resources or simply review the terms in your notes. It is YOUR responsibility to ensure that you know these terms!

Ecological footprint Hypothesis

Sustainability Independent variable

Tragedy of the Commons Dependent variable

CCC Control

NEPA Constant

EPA Feedback loop

Short Answer:

You are REQUIRED to answer each of the following questions on separate paper. ALWAYS write in complete sentences. Use both your class notes AND your textbook for reference.

1. Explain why the average ecological footprint of a person in Mexico is likely to be lower than that of a United States citizen.
2. Discuss the relationship between sustainability and tragedy of the commons.
3. Provide a global example of tragedy of the commons and name 3 approaches that might lessen this problem.
4. List the major environmental impact(s) of the agricultural revolution and industrial revolution.
5. Name the major environmental contribution of each of the following people: John Muir, Gifford Pinchot, Teddy Roosevelt
6. Distinguish between the traditional “Western” worldview and the “Deep Ecology” worldview of the environment.
7. Explain the difference between a natural experiment and a manipulative experiment.
8. Discuss the importance of the peer review process in science.
9. Make a chart of the various types of models that may be used in environmental science and give an example of each. Which type of model is likely to be most useful in environmental science? Why?
10. Explain the feedback mechanisms of water vapor as a greenhouse gas and predator-prey relationships.

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