Ecology Exam Review

Review outlines, class notes, labs & activities

This is a GENERAL list, and does not include every term you should know!

Chapter 1: An Introduction to ES

- Ecological footprints
- Sustainability
- Tragedy of the Commons
- Biotic vs Abiotic Factors

Chapter 2: Environmental Systems

- Feedback Loops
- Energy Forms & Flow
- Thermodynamics
- Half Life
- Molecules of Life

Chapter 3: Ecosystem Ecology

- Types of Organisms
- Ecological Pyramids
- NPP/GPP
- Photosynthesis/Cellular Respiration
- Biogeochemical Cycles

Chapter 4: Studying the State of Earth

- Sun, Wind, Currents
- Weather & Climate
- Interplanetary Processes
- Plate Tectonics
- Geologic Time & Dating
- Biomes

Chapter 5: Evolution of Biodiversity

- Evolution & Speciation
- Domains and Kingdoms
- Succession
- Community Interactions & Relationships
- Niche
- Keystone Species
- Species Richness

Possible Open Response Topics:

- Tragedy of the Commons
- El Nino
- Biogeochemical Cycles
- Ecological Succession
- Positive & Negative Feedback
- Desert Formation
- Energy Flow
- Range of Tolerance

Review Game Rules

1. In groups of 3 to 4 students, create a list of *25 review questions* based upon the above topics. These questions should be solid review questions, not simple fact type questions. At the same time, they should not be strange, obscure questions that would never be on the AP test. Please neatly write the numbered questions one page and include the detailed answers on another page. YOUR GROUP WILL BE GRADED ON THE QUALITY OF THE QUESTIONS.

   Then, on review day:

2. Each table will start with 100 points.
3. I will choose a number from a hat to determine the starting table and direction of play.
4. The first table will choose another table to answer a question.
5. That table chooses a question between #1-25 to answer (if that number has already been asked, they will choose a different number).
6. After the question has been read, the table will have 30 seconds to discuss and provide and answer.
7. If they get it correct, they will receive 100 pints. If they get it wrong, the 100 points will go to the questioning team.
8. They team with the highest score will earn 5 points on their ecology exam.