Environmental Systems and Societies

Unit Two: Systems a Theoretical Framework Study Guide

Terms with which you should be familiar:

* System
* Open system
* Closed system
* Isolated system
* First law of thermodynamics
* Second law of thermodynamics
* Entropy
* Equilibrium
* Steady State equilibrium
* Static equilibrium
* Negative feedback
* Positive feedback
* Transfers
* Transformations
* Flows
* Storages
* Models

You should be able to:

1. Define what components comprise a system.
2. Show how the concept of a system can be applied on a range of scales.
3. Distinguish between the first and second laws of thermodynamics.
4. Explain how entropy is related to a food chain.
5. Using a given system, construct a diagram showing the flows, storages, transfers, and transformations of that system.
6. Compare and contrast feedback loops using examples.
7. Cite evidence which illustrates the types of equilibrium.
8. Draw conclusions from examples as to the type of system.
9. Analyze a model for its strengths and weaknesses.

Test format:

* Multiple choice
* Short (1-2 sentences) answer
* Short essay (1-2 paragraph)
* Diagramming

Sources of information:

* Videos/ outlines
* Readings/ discussion notes
* Projects
* Quizzes