

What to Know – Chapter 4

Biology B

- Greenhouse effect
 - Define
 - Major substances that create effect
- 3 main climate zones of biosphere
 - Factor that creates 3 zones
- Heat transport in biosphere
 - Cause of heat transport
 - Influence of land masses
- Biotic & abiotic
 - Define
 - Examples
- Niche
 - Define
- Community Interactions
 - Competition
 - Competition Exclusion Principle
 - Symbiosis
 - Mutualism
 - Commensalism
 - Parasitism
- Ecological succession
 - Primary
 - Secondary
- Biomes
 - Define
 - Climate Graph Lab
 - Interpret graphs
 - Compare climate graphs from different locations
 - Hypothesize factors influencing climate based upon biotic and abiotic factors
 - Simpson's Diversity Index Lab
 - What factors affect biodiversity in ecosystems
 - Apply formula for Simpson's Diversity Index

Ecology Chapter 5: What to Know

Biology B

- Populations – 3 main characteristics – define, examples
 - Be able to calculate population density
 - Range – relate to 1 main characteristic
- 3 things that affect population growth – list
 - Immigration vs. emigration – compare, contrast
- Logistic growth – define, identify characteristic graph curve shape
- Exponential growth – define, identify characteristic graph curve shape
- Carrying capacity – define, relate to exponential and logistic growth – when is it reached?
 - Effect on population growth
- Infer causes of population growth graph curves
- Limiting factors – define, examples
 - Density-dependent
 - Density-independent
- Demography – define
- Demographic transition hypothesis – explain, know the steps in the progression of this model
 - Examples of countries that have completed demographic transition
 - Examples of countries that have not completed demographic transition
- Age structure diagrams – interpret
 - Predict future population growth based on a diagram
 - Explain predictions using information from a diagram

