

Chapter 3 & 4 Test: The Biosphere & Ecosystems: What to Know

Biology B

- Ecology – define
- Levels of organization – from species → biosphere
 - Land biomes – what factors determine plant and animal life in each?
 - Aquatic biomes
 - Photic and aphotic zones
 - Estuaries
- Energy in ecosystems
 - Source
 - How energy moves through ecosystems
 - Energy pyramid
 - Explain
 - Be able to calculate % energy transferred between trophic levels
 - Producers, consumers (1st, 2nd, 3rd level, etc.) – define, examples
 - Decomposers – define, examples
 - Autotroph, heterotroph – define, examples
 - Food chains & food webs – define, interpret diagrams
 - Trophic level – define
 - Biomass pyramid – explain
 - Primary productivity – define
- Matter in ecosystems
 - How movement in ecosystems is different from energy
 - Matter cycles – general description
 - Water cycle
 - Carbon cycle
 - Nonhuman and human processes that drive it
 - Climate
 - Distinguish from weather
 - 3 climate zones
 - Why is latitude important?
 - Nitrogen cycle
 - Nitrogen fixation
 - Explain
 - What organisms carry it out?
 - Nutrient – define, examples