

NAME \_\_\_\_\_

WHAT SHOULD I KNOW ABOUT BIOSPHERE?  
(Chapter 3 & 4-2)

What is ecology?

Be able to define:  
species;

population;

community;

ecosystem;

biome;

biosphere;

Tell how these are related.

How is a habitat different from a niche;

What are biotic and abiotic factors?

What is the Competitive Exclusion Principle?

How is the movement of matter and energy through an ecosystem different?

What are autotrophs? Give examples.

What are heterotrophs? Give examples.

What are two ways autotrophs make energy

Photosynthesis:

Chemosynthesis:

How are these different?

What is a resource?

A food chain?

A food web?

How are food chains and food webs related?

How do the following get their energy? Be able to give examples of each of these.

herbivore,

carnivore,

omnivore,

detrivore,

decomposer

What is a trophic level?

What percentage of energy is passed on from one trophic level to the next?

Be able to identify: autotrophs (producers) and heterotrophs (consumers) in a food web and tell what effect changes in a population will have on other populations.

What is a biogeochemical cycle?

Be able to answer ?'s about the 4 cycles you learned about.  
(water, carbon, nitrogen, phosphorus)

How do these atoms enter and leave the atmosphere, land, water, and cycle through the ecosystem?

**In which cycle does the atmosphere NOT play a role?**

**Which biomolecules are important to living things and which cycles provide the atoms to build these?**

**What is transpiration?**

**Nitrogen fixation?**

**Denitrification?**

**Evaporation?**

**Condensation?**

**Precipitation?**

**Which organisms play a role in these processes?**

**What are the ways organisms interact in an ecosystem? Be able to identify examples of each**

**What is Competition? What are some things organisms must compete for?**

**How do organisms cooperate?**

**Predation? Predator? Prey?**

**What are the 3 kinds of symbiosis?**

**What is a limiting factor?**

**How does it affect a population?**

**An algal bloom?**

**What happens when an over abundance of a limiting factor becomes available?**