**Ecosystem Quiz – Study Guide**

**STEM II – BI 111**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Define the following terms:
   1. Organism
   2. Population
   3. Community
   4. Ecosystem
   5. Primary producer
   6. Primary consumer
   7. Scavenger
   8. Food web
   9. Food chain
   10. Biomass
   11. Mutualism
   12. Parasitism
   13. Commensalism
2. List two ways ecologists study the natural world.

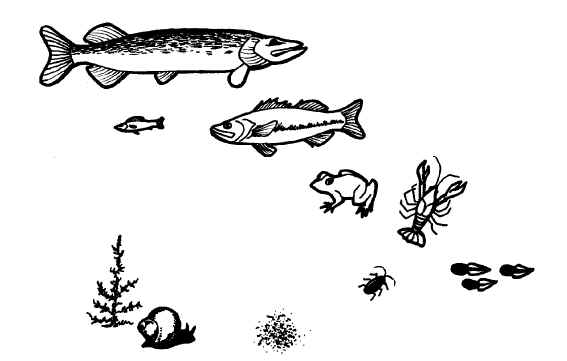
1. Provide an example of a primary producer.
2. Compare the amount of nutrients available in ocean ecosystems to land ecosystems.
3. 10% of the energy is available to organisms at the next highest trophic level, how is most of the 90% of energy lost?
4. What is another name for a heterotroph?
5. Draw what happens during transpiration.

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1. Provide an example for how biotic and abiotic factors interact.

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1. List the organization of an ecosystem from simplest to most complex using the following terms: species (organism), ecosystem, communities, populations.
2. Algae at the bottom of a food chain can best be described as what trophic level?
3. What is the term for each step in the transfer of energy and matter within a food web?
4. Describe the role of decomposers in an ecosystem.
5. Is transpiration one of the possible steps in the carbon cycle? If not, what cycle is transpiration part of?
6. For the diagram, draw arrows to show how energy and matter move through the ecosystem.



tad poles

plant

detritus

1. From the diagram, identify one primary producer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. From the diagram, identify one secondary consumer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. From the diagram, identify one primary consumer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. From the diagram, identify one tertiary (3rd level) consumer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. From the diagram, identify one decomposer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_