

# Ecosystems Quiz REVIEW

**Learning Target 1:** Matter and energy move through ecosystems. All energy within an ecosystem originates from the sun and flows through the ecosystem.

**Learning Target 2:** Organisms and populations of organisms depend on interactions with other living things and with nonliving factors.

**Learning Target 3:** Changes to ecosystems can lead to shifts in populations of plants and animals.

1. What uses energy from the sunlight to make its own food? producers/plants
2. How are humans classified in the food chain?  
Producers \_\_\_\_\_ Decomposers \_\_\_\_\_ Consumers
3. What are primary consumers? an animal that feeds on plants, an herbivore!
4. Give an example of a predator and it's prey: Predator: wolf Prey: rabbit  
*answers will vary.*
5. What do the arrows in food chains or webs represent? flow of energy
6. What fuels an ecosystem? the SUN
7. All communities include populations of producers, consumers, and decomposers. Give an example of each near a pond.  
Producer: water lily Consumer: large mouthed BASS Decomposer: bacteria
8. A food chain begins with a <sup>which organism</sup> plants/producer and ends with a decomposer.
9. When energy moves through a food chain, the energy... increases or decreases. (circle one)  
Why? the organism that was eaten burned off some of the energy through daily living.
10. Define biotic: living components of an ecosystem  
Biotic example: squirrel, raccoon, bear (Answers will vary!)
11. Define abiotic: non-living components of an ecosystem  
abiotic example: oxygen, rocks, wind, rain, pollution (Answers will vary!)
12. What does symbiosis mean? a close, long lasting interactions between two different species
13. Provide an example of a parasitic relationship: Lice in human's hair  
one organism benefits from the relationship and the other is harmed.
14. Provide an example of a mutualistic relationship: clown fish & sea anemone  
both organisms benefit from the relationship
15. Provide an example for commensalism: cattle egret (bird) & cattle  
one organism benefits from the relationship and the other is not helped or harmed

Define the terms, below.

ecosystem: a community and its physical environment together

population: all the individuals of the same kind of species living in the same environment

community: all the populations of organisms living together in an environment

food web: a diagram made up of many food chains showing which animals eat other animals; shows the transfer of energy

energy pyramid: a triangular diagram that shows the amount of energy available to be passed from one level to the next

carbon cycle: the process in which carbon atoms continually travel from the atmosphere to the earth and then back into the atmosphere.