

## Ecology Quiz Review – ANSWERS!

1. Commensalism – symbiotic relationship in which one organism benefits and the other is unaffected.

Mutualism – symbiotic relationship in which both organisms benefit.

Parasitism – symbiotic relationship in which one organism benefits and the other is harmed or killed.

Predation – a biological interaction where a predator feeds on a prey.

- 2A. Commensalism

B. Mutualism

C. Parasitism

D. Predation

3. Autotrophic organisms produce their own food by way of photosynthesis. They are also at the base of a food chain or trophic pyramid.
4. Answer will vary – You will need two plants, two herbivores, and two carnivores
5. Decreases. Only 10% of the energy available at one level is passed to the next level.
6. If 10,000 units of energy are available to the grass at the bottom of the food chain, only 1000 units of energy will be available to the primary consumer, and only 100 units will be available to the secondary consumer.
7. Population is the number of a specific species living in an area.
8. B – All members of the *Turdus migratorius* species.
9. The number of secondary consumers would increase.
10. The energy decreases as you move up the pyramid which is indicated by the pyramid becoming smaller near the top.
11. Second highest-level consumer would increase.
12. Primary consumer would decrease due to higher numbers of secondary consumer.
13. The number of organisms would decrease due to the lack of food for primary consumers. Other consumers would decrease as the numbers of their food source declined.

14. Number of highest-level consumers would decrease due to lack of food.
15. An organism's specific role in their environment.
16. Decomposers – break down dead and decaying matter.  
Producers – produce their own energy through photosynthesis for primary consumers.  
Primary consumers – eat producers and are a food source for secondary consumers.  
Secondary consumers – eat primary consumers and are a food source for tertiary consumers.  
Tertiary consumers – eat secondary consumers and are a food source for higher level consumers.
18. primary – 1000  
secondary – 100  
tertiary – 1
19. Only 10% of the energy available at any one level is passed to the next level. Energy is neither created nor destroyed but when it is changed from one form to another some is lost as heat.
20. What occurs during photosynthesis? process through which plants convert solar energy into chemical energy  
What is DNA's main function? Storing genetic information  
What is the function of enzymes? They lower the amount of energy needed to carry out chemical reactions.  
What is Mitosis? The division of somatic cells for the purpose of growth and/or repair  
What is Meiosis? The division of cell cells for the purpose of reproduction  
What is Osmosis? The movement of water across a semi permeable membrane from an area of high concentration to low concentration.