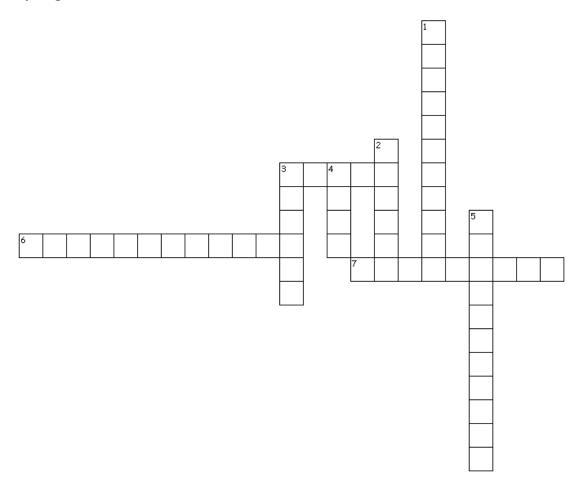
# **Ecology Test** Study Guide

#### Metrics, Graphing, and Word Roots



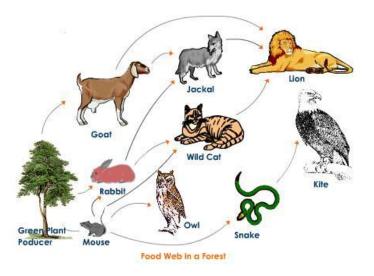
#### Across

- 3. prefix meaning same
- 6. observation including numbers
- 7. variable on the side of the graph Down
- 1. observation with no numbers
- 2. amount of space an object takes up
- 3. prefix meaning different
- 4. amount of matter in an object
- 5. variable on the bottom of the graph

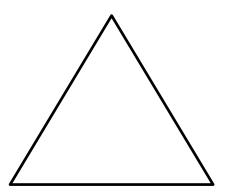
6. What is the difference between a beaker and a graduated cylinder?

7. 3.8 km = \_\_\_\_\_ cm

## **Energy Flow and Populations**

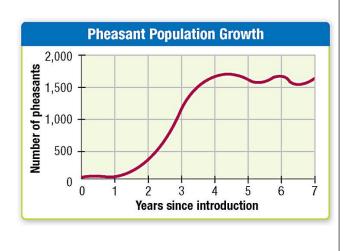


- 1. What is the producer in the food web above?
- 2. What is another word for producer (self-feeder)? \_\_\_\_\_\_
- 3. What consumers get their energy from the rabbit?
- 4. Which consumer is an omnivore?
- 5. What is another word for consumer (different) feeder? \_\_\_\_\_\_
- 6. Where does the Jackal get its energy? \_\_\_\_\_
- 7. Choose one food chain from the image above and construct an energy pyramid.



- 8. Which trophic level contains the least amount of stored energy?
- 9. Which trophic level contains the producers? \_\_\_\_\_\_
- 10. Which trophic level contains the herbivore?
- 11. The wild cat and the jackal help each other out by watching for the lion. What type of symbiosis is this?
- 12. The kike bird will sometimes feed on the eggs of the snake. What type of symbiosis is this?

## Populations



1. What is the carrying capacity of the Peasant Population?

2. Estimate the number of Pheasants in the population in year 2.

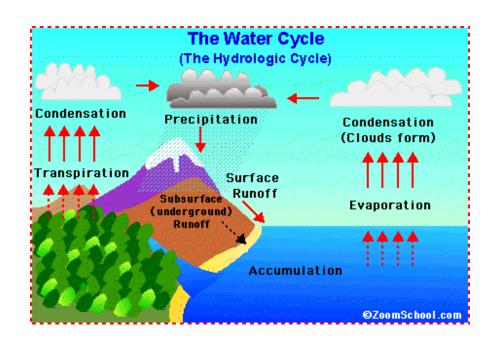
3. Which variable is the dependent variable?

4. What could you do in year 3 to control the Pheasant population?

5. What type of growth is shown in this graph? How do you know?

## **Nutrient Cycles**

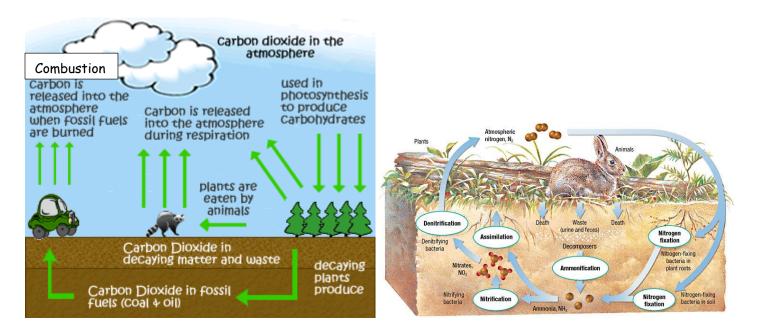
- 1. Which water cycle process involves producers losing water to the atmosphere?
- 2. How does water move from the atmosphere back to land?



- 3. Which carbon cycle process removes carbon dioxide from the atmosphere?
- 4. Which carbon cycle process moves carbon dioxide from living organisms into the atmosphere (breathing)?
- 5. Which carbon cycle process involves burning of fossil fuels to add carbon dioxide to the atmosphere?
- 6. Carbon dioxide is one gas responsible for increased global temperatures. This is why carbon dioxide is

considered a \_\_\_\_\_ gas.

- 7. The warming of global temperatures is called \_\_\_\_\_\_ warming.
- 8. How does carbon from once living animals get released into the soil?



- 9. Which nitrogen cycle process changes non-usable atmospheric nitrogen into usable nitrogen (ammonia)?
- 10. Which nitrogen cycle process changes ammonia back into atmospheric nitrogen?
- 11. How do plants get the nitrogen they need?
- 12. What happens to the nitrogen from a dead animal or plant?