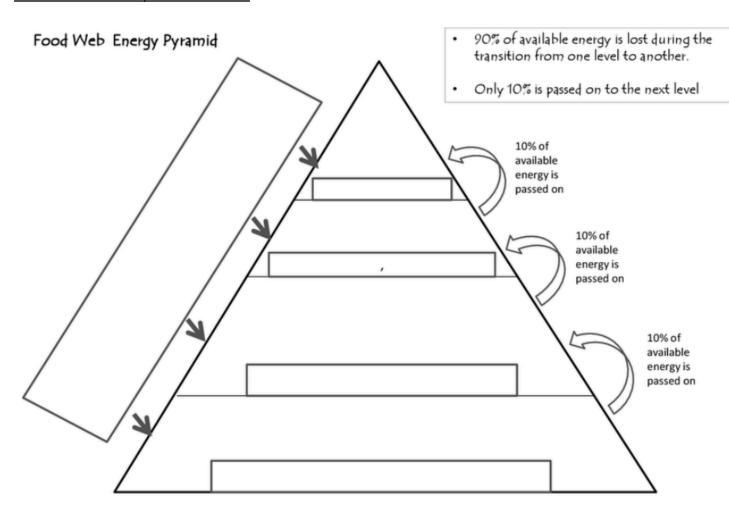
# **Ecology Notes**

• Food Webs and Ecosystem Interaction

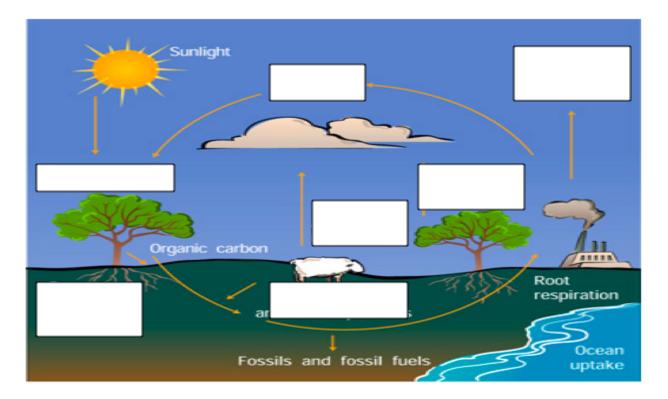


• Biotic and Abiotic Factors

<u>BIOTIC</u> means					
Examples of biotic factors:					
Abiotic means					
Examples of abiotic factors:					
Give an example of how a biotic factor can affect an abiotic factor in a forest ecosystem:					
Give an example of how an abiotic factor can affect a biotic factor in a forest ecosystem:					

### • The Carbon Cycle

Label the diagram below with the following terms: carbon dioxide, plant respiration, animals respiration, photosynthesis, emissions by cars and factories, decomposition, carbon stored in organisms



• Population Density and Models

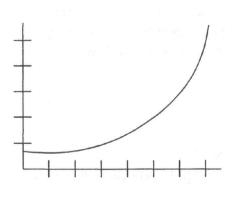
Population density is \_\_\_\_\_

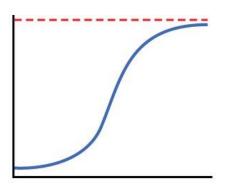
Calculate the population density of the puppies in the square below if each side of the square is 2 km long:



What is the population density of America if there are 324 million people and the country covers 3.8 million square miles?

Label the graphs below with the following terms: exponential growth, logistic growth, carrying capacity, time, population size





<u>Factors</u>

Limiting factors are \_\_

*Density-dependent* means

**Density-independent** means

Label each of the following limiting factors as density dependent (DD) or density independent (DI) and as biotic (B) or abiotic (A):

Disease	Natural Disasters	Availability of food	Seasonal Changes
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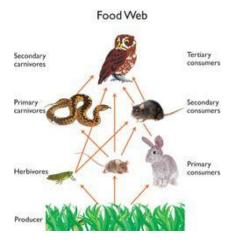
Limiting

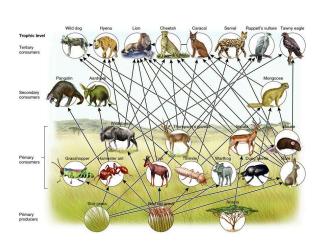
Weather Predation Competition Space

When the amount of carbon dioxide in the atmosphere increases, the temperature (increases/decreases). When the temperature increases, the amount of plants (increases/decreases). When the amount of plants increases, the amount of carbon dioxide in the atmosphere (increases/decreases).

### • <u>Biodiversity</u>

Which of the ecosystems below would be more stable? Why?





### Succession

<u>Succession</u> is the process of creating a new ecosystem where one did not previously exist.

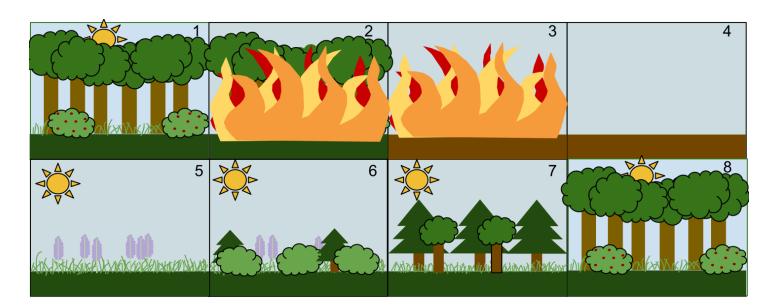
Primary succession occurs when \_\_\_\_\_

What is happening in each image? Use and underline the terms climax community and pioneer species



Secondary succession occurs when \_\_\_\_\_

What is happening in each image? Use and underline the terms climax community and disturbance.

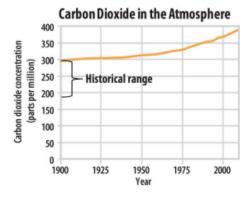


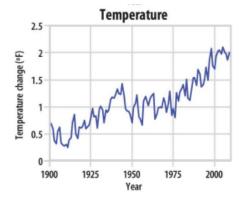
## • The Greenhouse Effect

Use the diagram below to explain the greenhouse effect and how it impacts the Earth's temperature



Use the graphs below to explain the relationship between greenhouse gases and global climate





## **Human Impact**

Impact	What is it?	Where is it happening?	What is the effect?
Deforestation			
Invasive Species			
Pollution			
Tollarion			
Overharvesting			
of Species			