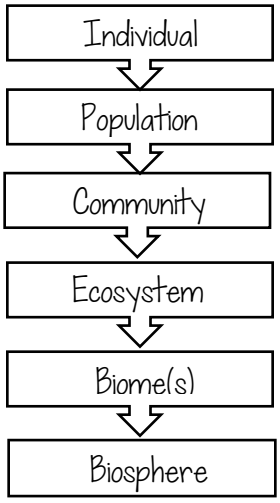
Ecology Study Guide

Name:_____ Date:_____ Block:_____

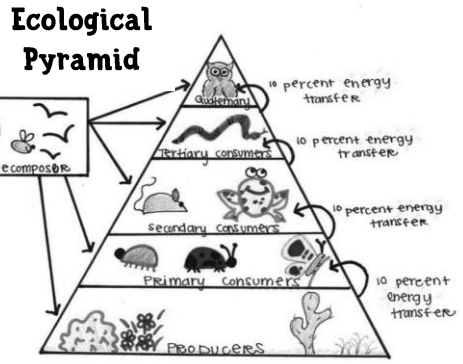


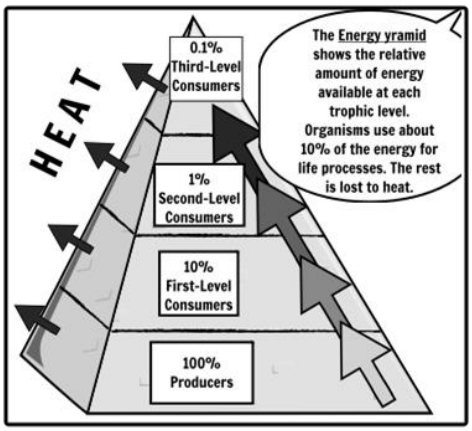
Ecological Hierarchy:

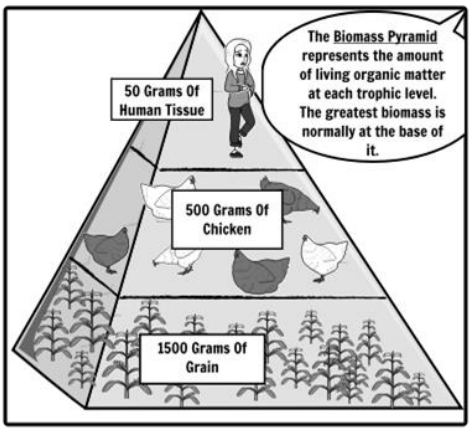
1. What is the **biosphere**? _____
2. What is a **biome**? _____
3. What are **two** things that define a biome? _____
4. What is an **ecosystem**? _____
   a. What are **biotic** factors? _____
   b. What are **abiotic** factors? _____
5. What is a **community**? _____
6. What is a **population**? _____
7. Know basic characteristics of all biomes. **Tundra vs. Desert & Tundra vs. Rain Forest**

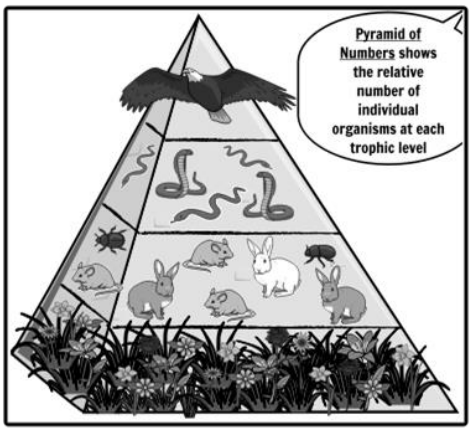
Introduction to Ecology:

1. What are **autotrophs?**_____
   a. Another name for autotrophs are? _____
   b. Name a couple of examples. _____
2. What are **heterotrophs?** _____
   a. Another name for heterotrophs are? _____
   b. Name a couple of examples. _____
3. What are **trophic levels?** _____
4. What is an **ecological pyramid**? _____
   _____
5. Know the difference between an **Energy Pyramid**, **Biomass Pyramid**, & the **Pyramid of Numbers**.

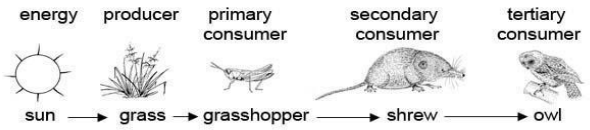


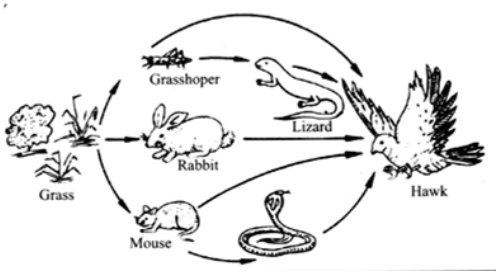






6. What is a **food chain**? _____

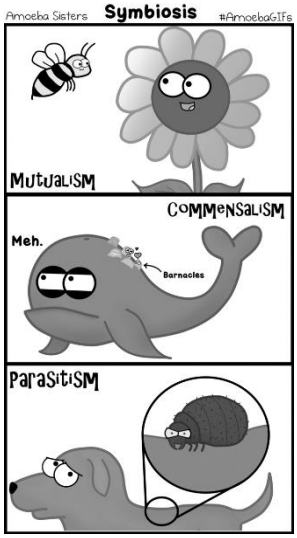




7. What is a **food web?** _____
8. What is the **10% rule?** _____
9. What happens to the rest of the energy? _____

Symbiotic Relationships:

1. What is **symbiosis**? _____
2. What is **competition**? _____
   a. Give an example: _____
3. What is **predation?** _____
   a. Give an example: _____



4. **What is mutualism?** _____
   Indicate in the boxes how the organisms benefit

Organism 1	Organism 2

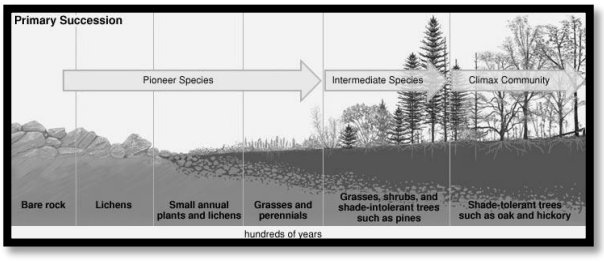
5. **What is commensalism?** _____
   Indicate in the boxes how the organisms benefit

Organism 1	Organism 2

6. **What is parasitism?** _____
   Indicate in the boxes how the organisms benefit

Organism 1	Organism 2

Ecological Succession:



1. What is **succession?** _____
2. What is **Primary succession?** _____

   _____

   a. What does it begin with? _____ _____
   b. What are **pioneer species**? _____
   c. Give some examples of pioneer species: _____ _____ _____

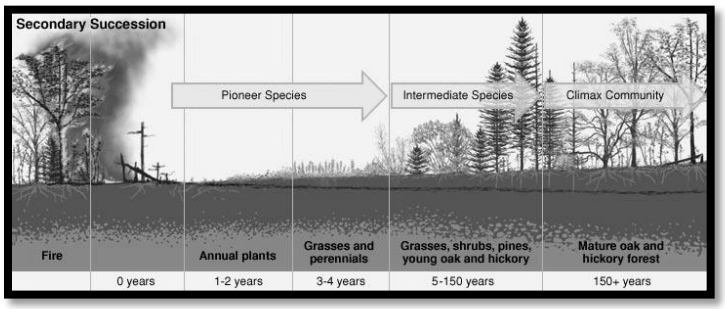
3. What is **Secondary Succession?** _____

   a. What is already established in secondary succession?

   b. When is secondary succession happen?

      _____

      _____



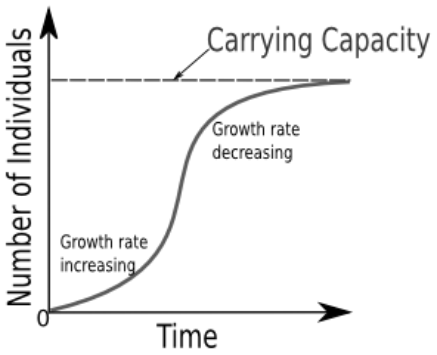
Population Growth, Dispersion & Survivorship:

1. What is **population density?** _____
2. What are three factors define population growth? _____ _____ _____
3. How do you know when the population is growing? _____

   _____
4. What are **K species?** _____ Give an example: _____
5. What are **R species?** _____ Give an example: _____
6. What is **exponential growth?** _____

   a. Is this a stable, sustainable growth? _____

   b. What shape does this growth make? _____



7. What is **logistical growth?** _____

   _____

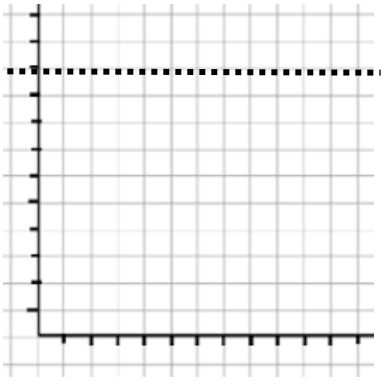
   a. Is this a stable, sustainable growth? _____

   b. What shape does this growth make? _____

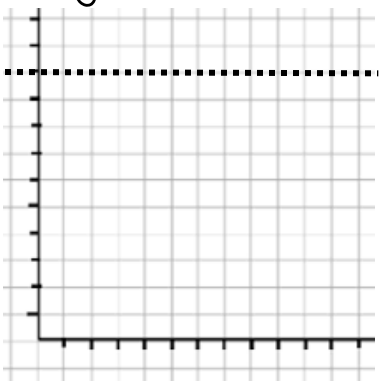
   c. This growth will continue until what is met? _____

   d. What is **carrying capacity?** _____
8. In the graphs to the below, draw what **exponential growth** and **logistic growth** look like.

Exponential Growth



Logistical Growth



9. What are **Density-Dependent factors?** _____

_____

   a. What do these factors include? _____

   _____

10. What are **Density-Independent factors?** _____

_____

   a. This characteristically causes what? _____

   b. What factors do these include? _____

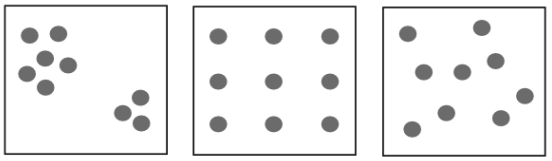
11. What is **population dispersion?** _____

12. What is **clumped dispersion?** _____

_____

   a. What is it good for? _____

   _____



13. What is **uniform dispersion?** _____

   a. What is this good for? _____

14. What is **random dispersion?** _____

   a. How does this typically happen? _____

15. What are **survivorship curves**? _____

_____

16. Write a few facts about **Type I Survivorship Curves:**

   a. _____

   b. _____

   c. _____

17. Write a few facts about **Type II Survivorship Curves:**

   a. _____

   b. _____

   c. _____

18. Write a few facts about **Type III Survivorship Curves:**

   a. _____

   b. _____

   c. _____