

**TOPIC 1 REVIEW: Ecology Basics (Vocab, Succession, Biomes)**

**Part I: Vocabulary**

1. Define *ecology*: the \_\_\_\_\_ of interactions between \_\_\_\_\_ and the environment (includes both \_\_\_\_\_ and \_\_\_\_\_ factors).
2. Put the following in order from most broad to most specific: biome; organism; community; biosphere; population; ecosystem
  - a. \_\_\_\_\_
3. Using the list above, which levels contain only living/biotic factors? \_\_\_\_\_
4. Define:
  - a. Biotic: \_\_\_\_\_
  - b. Abiotic: \_\_\_\_\_
5. An organism's niche includes more than just its habitat. Explain what this means- what else is included? Give an example: \_\_\_\_\_
  - a. An organism has both a fundamental niche and a realized niche. Which of these includes what an organism *actually* does/uses/eats/lives? \_\_\_\_\_
  - b. An organism can be classified as either a generalist or a specialist. What is a raccoon classified as? \_\_\_\_\_ Why? \_\_\_\_\_

**Part II: Succession**

6. Succession is defined as a series of changes in an \_\_\_\_\_ in which populations of organisms gradually \_\_\_\_\_ existing ones.
7. What type of succession occurs in an area that has not had an existing community? \_\_\_\_\_
  - a. The first organisms to inhabit this area are called: \_\_\_\_\_ species and examples include \_\_\_\_\_
    - i. These organisms are \_\_\_\_\_ and reproduce/grow \_\_\_\_\_
8. What type of succession occurs in an area that has had a community before, but it has been partially damaged? \_\_\_\_\_
  - a. What could cause this destruction? \_\_\_\_\_
9. Succession eventually slows and a stable community has been established. What is this community called? \_\_\_\_\_

**Part III: Biomes – match each to its description (responsible for aquatic biomes, as well)**

Tundra	a. biome that contains mostly grass like vegetation with scattered trees, experiences seasonal changes in weather, and receives average amounts of rainfall (lions, zebras)
Tropical Rainforest	b. located south of the arctic circle, this biome has short summers and long/cold/dry winters
Temperate Forest	c. this biome lacks trees and is characterized by grasses/herbs with animals that feed on this vegetation (bison)
Boreal Forest	d. coldest biome, a layer of permafrost under the top layer of soil, & low precipitation
Desert	e. located beneath the boreal forest, this biome has well-defined seasons (our biome)
Savannah	f. a biome characterized by extremely dry conditions, hot days/cool nights
Temperate Grassland	g. biome characterized by high amounts of precipitation & a temperature that doesn't vary more than about 5 degrees all year