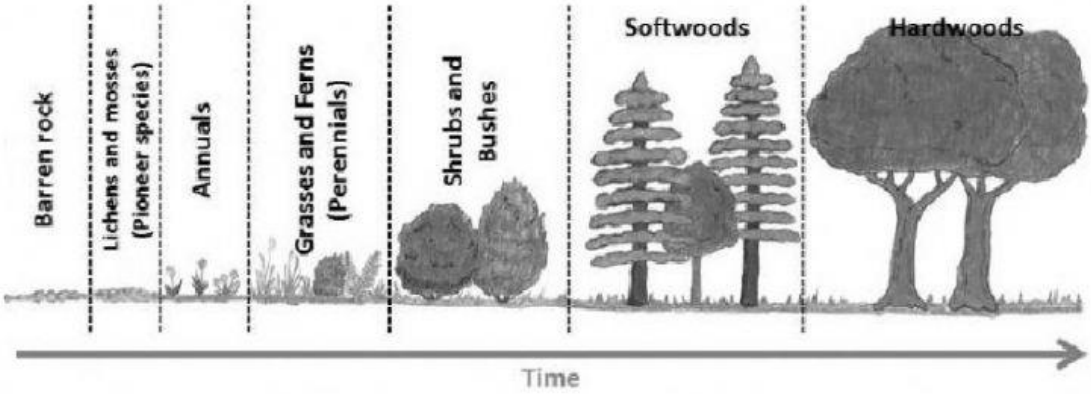
Nov 8-12 Station 1-4

Station 1: Organize Ecological Succession

Directions: Use the diagram below and your notes to help you answer the multiple-choice questions about ecological succession.



1. *Biomass* is the amount of living material present in an environment. *Biodiversity* refers to the variety of living things that are present in an ecosystem. Which of the following would you expect to occur over time as ecological succession moves forward?
A increases in both biomass and biodiversity
B decreases in both biomass and biodiversity
C increases in biomass, but decreases in biodiversity
D decreases in biomass, but decreases in biodiversity

2. Which of the following animal niches will be filled first as an ecosystem begins the stages of ecological succession?
A carnivore **B** scavenger **C** herbivore **D** apex predator

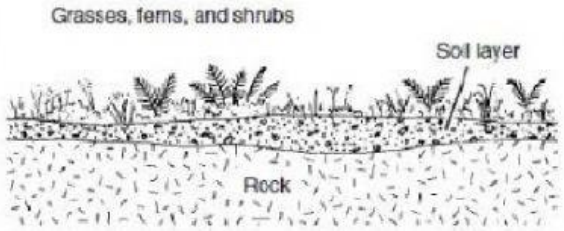
3. New ground begins as barren rock. This rock is covered in lichens and mosses, and eventually soil forms. Which two processes are most responsible for forming this soil at the beginning of ecological succession?
A Subduction and Deformation
B Transpiration and Precipitation
C Weathering and Decomposition
D Crystallization and Condensation

4. The diagram above shows how one community of organisms replaces another until which of the following is reached?
A pioneer community
B marine biome
C ecological pyramid
D climax community

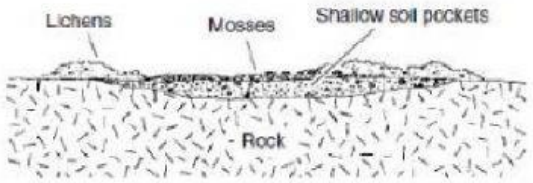
5. Lava from a volcano cools and becomes new, barren land. If this land is completely *barren*, then it would contain –
A only abiotic factors
B only biotic factors
C both abiotic and biotic factors
D neither abiotic or biotic factors

LIVEWORKSHEETS

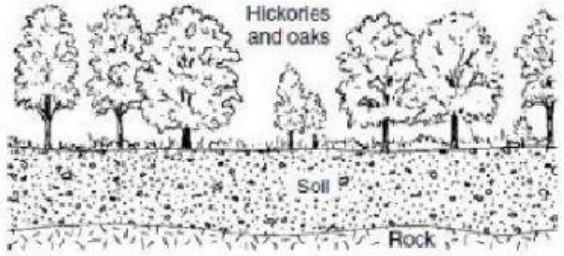
Q



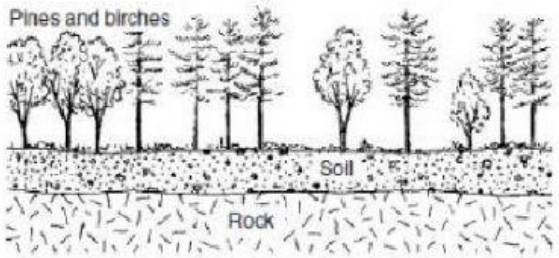
S



R



T



7. Each drawing above represents different stages in community succession. Which of the following represents the correct order that the stages would occur during ecological succession?

A $Q-S-R-T$ **B** $R-T-Q-S$ **C** $T-R-Q-S$ **D** $S-Q-T-R$

8. Which of the drawings above represents the climax community in this succession pattern?

A Q **B** R **C** S **D** T

9. Which of the drawings above represents the pioneer community in this succession pattern?

A Q **B** R **C** S **D**

10. What ecological factors changes throughout the process of succession and allows for the formation of a forest community?

A defense from attack by parasites
B more sunlight to warm the ecosystem
C the depth of the soil
D the amount of sunlight

Answer the following questions about populations, communities and ecosystems.

11. A student counts 14 dogs in his neighborhood. When he reports this information to his classmates at school he will be telling them about the dog -

A population **B** biome **C** ecosystem **D** community

Population → Community → ▨ **→ Biosphere**

12. Which of the following would accurately fill the gap in the diagram above?

A ecosystem **B** organ system **C** organism **D** niche

13. Which of the sequences below is listed from the least complex to the most complex?

A ecosystem → community → population → organism
B population → organism → ecosystem → community

LIVEWORKSHEETS

Station 2: What is biodiversity?





Which photograph shows the most biodiverse ecosystem? Explain your choice.

In your own words, explain what biodiversity is.

High Biodiversity



Low Biodiversity

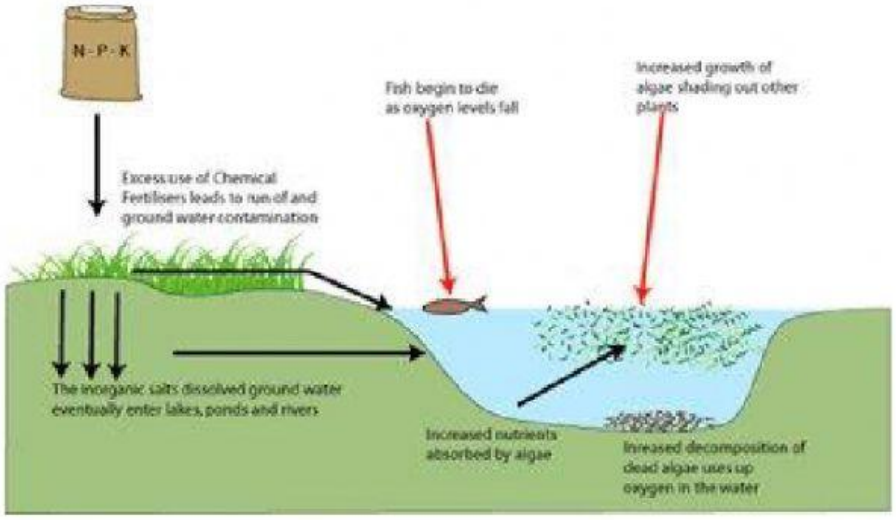


List some differences between the two examples above and explain how why there are differences.

LIVEWORKSHEETS

Station 3: Explain Eutrophication

Directions: Study the picture below showing the process of eutrophication. Then, read the passage explaining eutrophication below. Once you have finished studying the picture and reading the passage, answer the questions at the end of the page.



Answer the 3 questions below in complete sentences:

1. In your own words, how would you describe eutrophication to someone who doesn't know what it is?

2. In the process of eutrophication, why do animals lose oxygen?

3. Describe what a freshwater ecosystem might look like before eutrophication and then after eutrophication.

LIVEWORKSHEETS

Station 4: Review Biome Precipitation Graphs

Directions: Read the brief descriptions of each biome below. Then, based off of the information that you read, match each biome with its correct precipitation graph.

Desert

Desert biomes are the driest of all the biomes. In fact, the most important characteristic of a desert is that it receives very little rainfall. Most deserts receive less than 300 millimeters a year compared to rainforests, which receive over 2,000 millimeters. That means that the desert only gets 10 percent of the rain that a rainforest gets!

Grassland

The height of grass correlates with the amount of rainfall it receives. Grasslands receive about 500 to 900 millimeters of rain per year compared to deserts, which receive less than 300 millimeters and tropical forests, which receive more than 2,000 millimeters. Tropical grasslands have dry and wet seasons that remain warm all the time. Temperate grasslands have cold winters and warm summers with some rain.

Rainforest

The tropical rainforest is a hot, moist biome where it rains all year long. It is known for its dense vegetation that forms three different layers. The top layer, or canopy, contains giant trees that grow to heights of 75 meters (about 250 feet) or more. Precipitation is between 2,000 to 10,000 mm of rain per year.

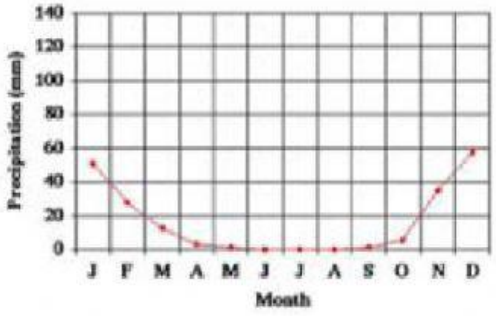
LIVEWORKSHEETS

Tundra

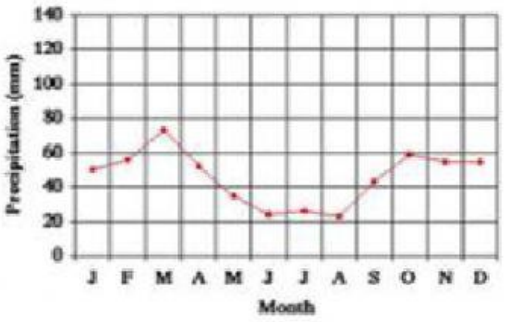
The tundra is the coldest of the biomes. It also receives low amounts of precipitation, making the tundra similar to a desert. Temperatures are frequently extremely cold, but can get warm in the summers.

Graph Bank









LIVEWORKSHEETS