

### Wed./Thurs. Sept 29-30 All about Biomes Stations

#### Station 1: Learning about Ecosystems

**Directions:** Before we can study each ecosystem, we have to know a little bit about them! Read the information about the ecosystems below and then give a description of that ecosystem. For example, you could describe what the ecosystem looks like, what animals or plants live there, what the climate is like, etc.

### Freshwater Biome

- Freshwater:** About 3% of water on Earth is freshwater. Areas around freshwater sources are called freshwater biomes. Freshwater is water that contains very little, or no, salt. Organisms that live in freshwater biomes cannot survive in salt water. Freshwater biomes include rivers, lakes, ponds, streams, and wetlands. Algae are tiny plants that live in freshwater biomes. They use energy from the Sun to make their own food. Many other organisms that live in freshwater biomes depend on the algae for food.



| Describe a Freshwater Biome | Copy and paste a picture of a freshwater biome from the internet |
|-----------------------------|--|
|                             |  |

### Marine Biome

- **Marine:** About 97% of Earth's water is salty. Areas made up of salt water are called marine biomes. Marine biomes include oceans, coral reefs, and estuaries. Some marine biomes are warm, such as tropical reefs. Some marine biomes are cold, such as the Arctic and Southern oceans. Marine biomes are home to many different kinds of organisms. Sharks, whales, fish, sponges, and **plankton** all make their home in marine biomes. All of these organisms are adapted to live in salt water.



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| Describe a Marine Biome | Copy and paste a picture of a marine biome from the internet |
|                         |  |

## Desert



- **Desert:** Deserts are biomes with very little precipitation and extreme temperatures. Some deserts are hot most of the time, such as the Chihuahuan desert in Texas. Other deserts are cold most of the time. Did you know that Antarctica is a desert? It gets very little precipitation and has extremely cold temperatures all year. Organisms that live in deserts are very good at conserving water and surviving in extreme temperatures.

**plankton**- microscopic plants and animals that live in water

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| Describe a Desert Biome | Copy and paste a picture of a desert biome from the internet |
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## Forest

**Forest:** There are several types of forest biomes. Forests that get a lot of rain are called rain forests. Forests with trees that shed their leaves in the fall are called deciduous forests. Some forests have trees that stay green all year. These are called coniferous forests. Many types of organisms make their home in the forest biomes. For example moose, deer, and mice commonly live in deciduous or conifer forests. Tree frogs, toucans, monkeys, and vines typically live in rain forests.



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| Describe a Forest Biome | Copy and paste a picture of a forest biome from the internet |
|                         |  |

## Grassland

**Grassland:** A grassland biome is well named since it is covered with different grasses. Grasslands may also have a few short trees, bushes, or shrubs. The grassland biome usually has rich soil that supports the grassy vegetation. Many organisms in the grassland biome depend on the plants for food and shelter. Grasslands are home to grazing animals, such as bison or antelope.

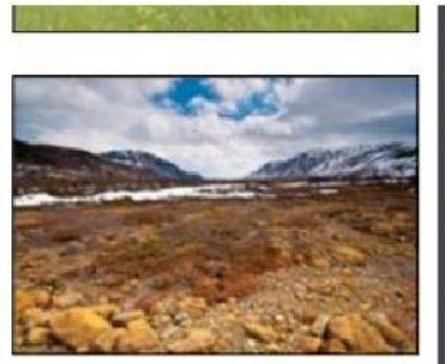


|                            |   |
|----------------------------|---|
| Describe a Grassland Biome | Copy and paste a picture of a grassland biome from the internet |
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## Tundra

**Tundra:** Tundra biomes, like deserts, are very dry. They are also cold most of the year. The tundra has little vegetation because of the harsh conditions. Most plants that inhabit the tundra have adapted to the cold, windy conditions. They are short and sturdy, making it difficult for them to be blown down by the wind. Most of the animals that live in the tundra migrate to warmer areas in the wintertime. The animals that stay are adapted to the cold weather and scarce food. For example, some animals grow thicker fur or hibernate.



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| Describe a Tundra Biome | Copy and paste a picture of a tundra biome from the internet |
|                         |  |

### Station 2: Abiotic and Biotic Factors

Directions: Answer the question below based on the picture you see.

Remember! **BIOTIC** factors are living things. **ABIOTIC** factors are non-living things.



Look at the photograph above. What biotic and abiotic factors can you identify? Describe as many as you can.

Biotic factors:

Abiotic factors:

How are the biotic and abiotic factors interacting?

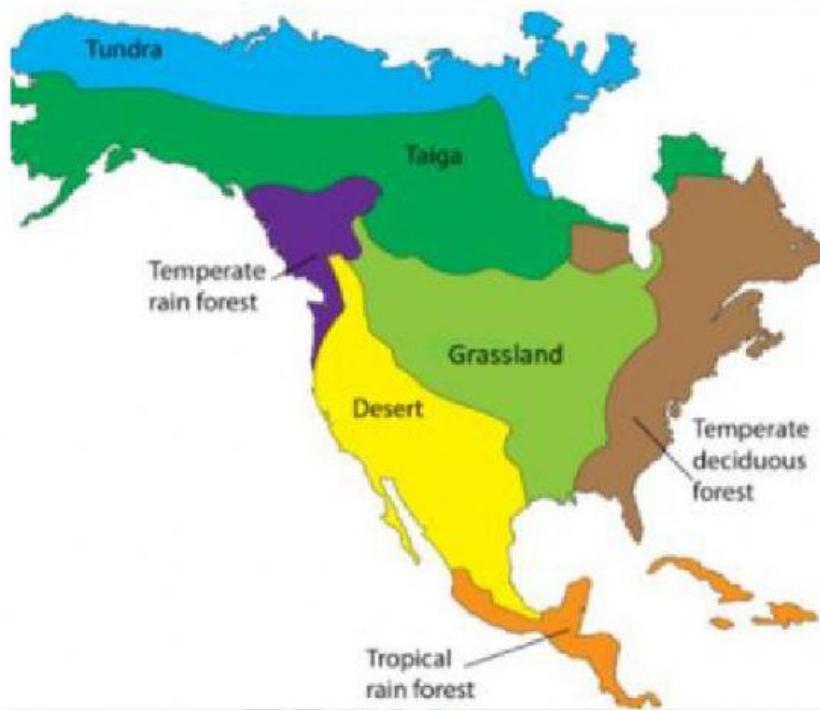
### Station 3: Biomes

Directions: Use what you know about ecosystems and environments to fill out the table below. First, decide if you agree or disagree with the statement in the left column. Then, explain your decision in the right column.

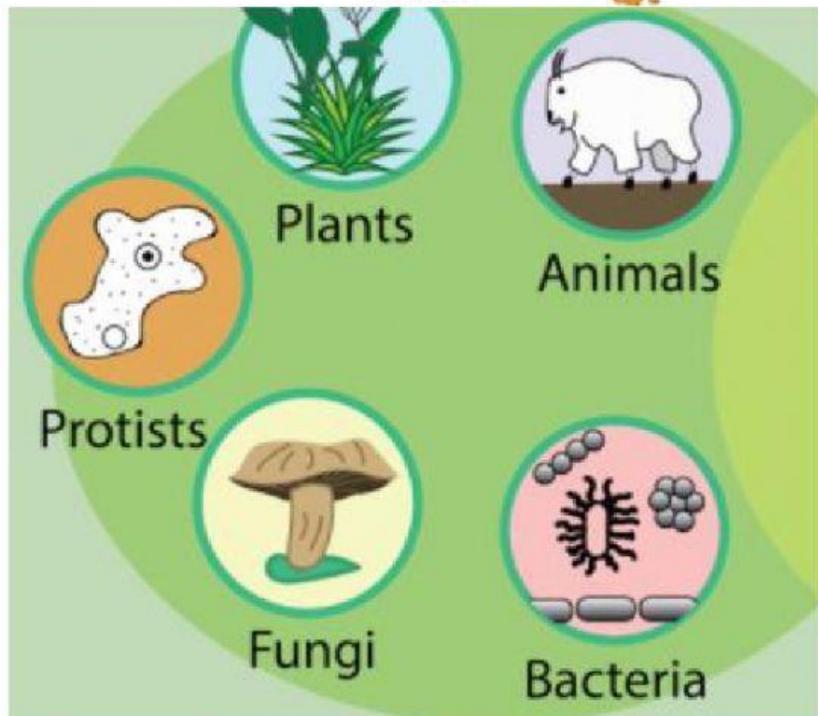
| Agree/Disagree?   | Explanation |
|---|-------------|
| <b>The tundra is a biome with tall trees and lots of rainfall.</b><br><br>Agree<br><br>Disagree         |             |
| <b>There are some deserts that experience extremely cold temperatures.</b><br><br>Agree<br><br>Disagree |             |
| <b>About 97% of the earth's water is fresh water.</b><br><br>Agree<br><br>Disagree                      |             |

#### Station 4: Vocabulary

Directions: Drag and drop the correct vocab word with its definition and picture.



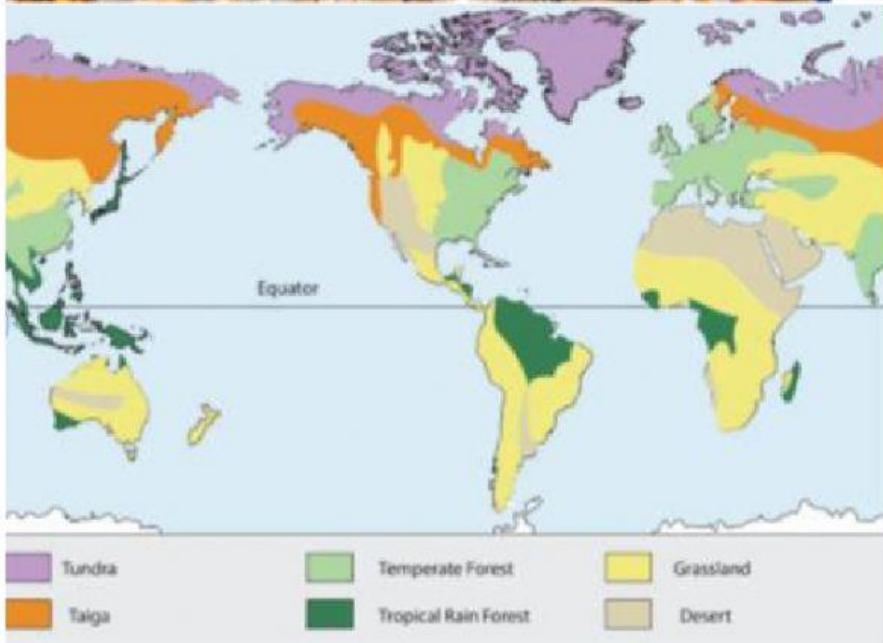
A type of biological community defined by its predominant plants, animals, and environmental conditions



A living thing that affects the ecosystem



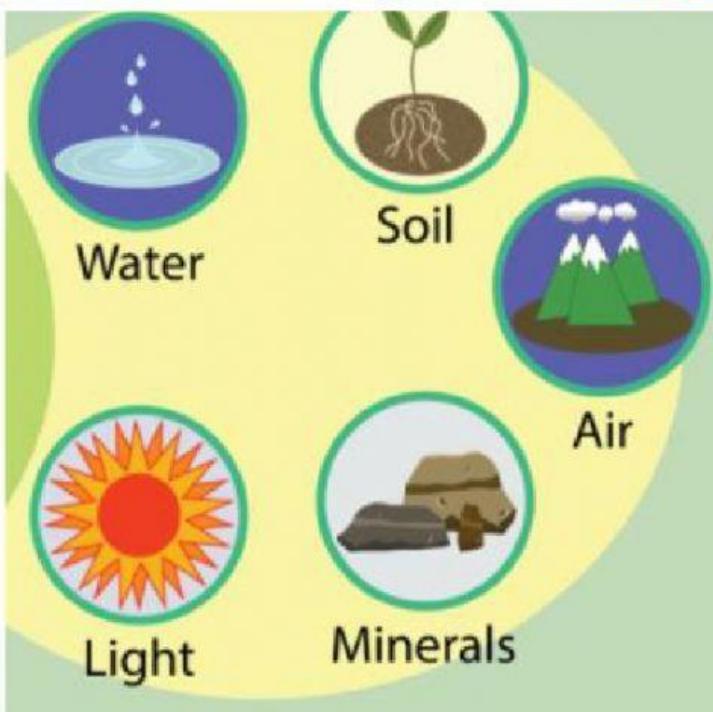
A system comprising all the biotic and abiotic factors in an area and all the interactions among them



A map that shows the climate of various regions in the world



Directional movements of ocean water; surface currents result from steady winds over the ocean surface; deep currents result from density variations due to temperature and salinity differences



A nonliving thing that affects the ecosystem

| VOCABULARY WORDS |                 |           |                |                       |                |
|------------------|-----------------|-----------|----------------|-----------------------|----------------|
| BIOME            | ABIOTIC FACTORS | ECOSYSTEM | BIOTIC FACTORS | GLOBAL CLIMATE CHANGE | OCEAN CURRENTS |