



BIOMES

What is a Biome?



- Scientists have developed the term biome to describe areas on the earth with similar climate, plants, and animals.
- The plants and animals that live in a specific biome are physically well adapted for that area.
- Plants and animals that live in a specific biome share similar characteristics with other plants and animals in that biome throughout the world.
- Scientists argue over the actual number of biomes but the ones usually agreed upon are: Tundra, Deserts, Grasslands, Taiga, Temperate Forests, and Rainforests with Fresh Water and Salt Water added in.

World Biomes





Gila Monster



Desert



Sidewinder

- **Location:** North & South America, Africa, Middle East, Australia, and Asia
- **Description:** Extremely hot and dry (less than 10 inches of rain a year). Some deserts can be cold at night (40s or 50s)
- **Plants:** Cacti, small bushes, and short grasses. Desert plants are adapted to collect and store water, and/or reduce water loss.
- **Animals:** Animals in this biome must adapt to intense heat and lack of water. Some animals never drink water, instead they get water from the seeds and plants that they consume. Many animals are nocturnal so that they do not have to combat the sun's heat.

More Desert Plants and Animals



**Lappet Faced
Vulture**



Thorny Devil



Cactus Wren



Hairy Old Man Cactus



**Saguaro
Cactus**



Prickly Pear Cactus



Arctic Fox



Tundra



Polar Bear

- **Location:** Regions south of the ice caps in the Arctic. In North America, Europe, and Siberia.
- **Description:** Coldest biome and also covers 1/5 of the Earth's surface.
- **Plants:** lichens, mosses, grasses, sedges, shrubs. Almost no trees due to short growing season and permafrost
- **Animals:** Every animal must adapt in order to survive. Some have grown thick fur which turns white in the winter. Others find a place to hibernate during the winter months.

More Tundra Plants and Animals



Snowy Owl



Caribou



Siberian Lynx



Cotton Plants



Lichen



Yellow Tundra Flower



American Bison



Grasslands



Zebra

- **Location:** Every continent except Antarctica
- **Description:** Grasslands are big open spaces. There are not many bushes in the grassland. Trees are found only by rivers and streams.
- **Plants:** Grasses (prairie clover, salvia, oats, wheat, barley, coneflowers)
- **Animals:** Many large herds of grazing animals such as zebras or bison. Animals live in herds for protection, because there are few trees and bushes to camouflage themselves.

More Grassland Plants and Animals



Brown Hyena



Giraffe



**Black tailed prairie
dog**



Coneflower



Wheat Grass



Salvia



Green Winged Macaw



Rainforest



Jungle Python

- **Location:** Near the equator between the Tropic of Cancer and the Tropic of Capricorn. South America, Asia, Pacific Islands, Australia, New Zealand, and Africa
- **Description:** Two types of rainforests, tropical and temperate. Several varieties of exotic plants and animals. Lush greens and vibrant colors.
- **Plants:** Vines, palm trees, orchids, ferns. Most plants must compete for sunlight and nutrients due to their dense population. The majority of common houseplants come from the rainforest.
- **Animals:** Life inside the wet tropical rainforest is bustling with slithering snakes and chirping birds. An animal must be both smart and strong to survive in this environment.

More Rainforest Plants and Animals



Flying Dragon



Chimpanzee



Capybara



Bamboo



Banana Tree



Orchid



Moose



Taiga



**Eurasian
Beaver**

- **Location:** Canada, Europe, Asia, and the United States
- **Description:** Also known as “Coniferous forests.” Taiga regions have cold, long, snowy winters, and warm, humid summers; well-defined seasons
- **Plants:** Coniferous-evergreen trees (trees that produce cones needles). The trees are narrow and grow very close together. This is so they can help protect each other from the weather. There are also moss, lichen, and other species of plants that live in the Taiga’s bogs.
- **Animals:** Snow, cold, and a scarcity of food make life very difficult, especially in the winter. Some taiga animals migrate south, others go into hibernation, while others simply cope with the environment.

More Taiga Animals and Plants



Lynx



Wolverine



Red Throated Loon



Hemlock



Larch Needles



Lichen growing on a tree



**White Tailed
Deer**



Raccoon

Temperate Forest

- **Location:** Eastern United States, Canada, Europe, China, and Japan
- **Description:** Temperate forests go through four seasons. Leaves change color in autumn, fall off in the winter, and grow back in the spring. This adaptation allows plants to survive the winters.
- **Plants:** Broadleaf trees (oak, maple, beech), shrubs, and mosses
- **Animals:** Animals living within this biome must adjust to cold winters and hot summers by hibernating, migrating, or keeping active all winter.

More Temperate Forest Plants and Animals



Grey Squirrel



Black Bear



Wild Turkey



Oak



American Beech



Maple

And just when you
thought you were
done...



Salt Water

- Consists of oceans, coral reefs, and estuaries
- Estuaries are areas where fresh and salt water environments converge. Mangroves, oysters, crabs and marsh grasses are examples of species in this environment.
- The ocean is the largest of all ecosystems.
- The ocean contains a diverse array of plants and animals at various depth zones.
- Coral reefs consist mainly of coral.





Fresh Water

- Includes ponds, and lakes; streams and rivers, and wetlands.
- Wetlands are areas of standing water that support aquatic plants.
- Ponds and lakes have well lit zones and a variety of fish dominate this zone.
- Streams and rivers move in one direction.

