

APES- Introduction to the World's Biomes

Objective: Understand the **plants, animals and climate** that characterize each biome of the world. Site: <http://mbgnet.mobot.org/> **Missouri Botanical Gardens**

Browse each biome and fill out the chart below and answer the questions below about each individual biome

Terrestrial Biome	Common Plants/ Animals	Interesting Features	Weather/Climate
Rainforest			
Tundra			
Taiga			
Desert			
Temperate			
Grasslands			

Aquatic Biomes	Common Plants/ Animals	Interesting Features	Weather/Climate
Rivers & Streams			
Ponds & Lakes			
Wetlands			
Shorelines			
Temperate Oceans			
Tropical Oceans			

Rainforests

1: What are the two types of rainforests? In the United States, where are our rainforests located? (Be specific). What percentage of our original rainforests does this represent?

temperate and tropical. Pacific Northwest of the USA, close to the coast in the temperate zone.

.57%

Tundra

2: Where is the Tundra Biome located? What is permafrost? What percentage of the Earth's surface is covered by Tundra?

Around the north pole. covers a fifth of the earth's surface.

Permafrost: a permanently frozen layer of ground

Taiga

3: Where is the Taiga Biome located? What is the soil like in the Taiga- why?

large portion of Canada, Europe and Asia. located between 50 degrees latitude north and the Arctic circle.

the soil's very, very cold in the winter. But when the warm summer comes, the ice and snow melt

Desert

4: How much rainfall is characteristic of deserts? Explain where most deserts are located and the RAINSHADOW Effect.

Deserts rain are only few periods per year. Is quite downpour.

30 degrees latitude north and 30 degrees latitude south.

Rainshadow: air moves up over a mountain range, it gets cold and loses the ability to hold moisture.

Temperate Deciduous Forest

5: What is special about this biome? Deciduous trees have special leaves that are adapted to the biome- explain.

Has 4 seasons, Animals and plants have special adaptations to cope with these yearly changes.

They change color, they lose their leaves in the winter and gain them again in the summer.

Grasslands

6: Grasslands are found on every continent except for one- which? How much rainfall do grasslands get- why is this important? What are the 3 types of grasslands that are found in North America? What are grasslands called in other places in the world?

3 types: Antarctica. They get between 10 to 30 in of rain. If they would get more they would become a rainforest .

Tall grass

Mixed grass

Short grass prairie.

Rivers & Streams

7: How much water on Earth does running water represent? What is a watershed? What are the two main processes that happen to surface water? What is the longest river in the world? What is the longest river in the United States? What is a hydroelectric dam?

Just .03% Watershed: area of land that contains a common set of streams and rivers that all drain into a single larger body of water.

2 process: Runoff surface, and infiltration.

Ponds & Lakes

Nile river, in Egypt. the world. The Mississippi river, is the largest in the USA.

Dam: is a man-made structure built across a river.

8: What is the difference between a pond and lake? Name the four stages of succession of a pond. Explain how an Oxbow Lake is formed. What is the largest lake in the world? What is the largest lake in the United States? What is the deepest lake in the world? What is Lake Effect Snow? Explain. What is the cause of summerkill in some lakes?

A lake is a large body of fresh water, Pond are huge body of water.

4 stages: 1 Pond pioneers. 2 Pondweed and other vegetations grow in the bottom. 3 Layer decaying raise the pond. 4 Ponds becomes marsh.

Oxbow: created over time as erosion and deposits of soil change the river's course.

Largest lake: Caspian Sea. In the USA: Superior.

deepest lake in the world is Lake Baikal in Siberia

Lake effect snow: snow falling on the lee side of the lake, it picks up moisture, cool hills.

Cause: growing algae are ripe, and oxygen levels decrease.

Wetlands

9: What are the types of freshwater wetlands- name and define them. Explain why wetlands are so important. What is happening to our wetlands?

swamps: slow moving streams.

marshes: Area inundate with 1-6 ft of water.

bogs: peat-accumulation wetland.

prairie potholes: wetland found in the northern great plains.

flood plains.

fen. riparian marsh:

The increase of murk, is putting in danger putting pest and disease.

Shorelines

10: What kind of lifeforms will you find in the intertidal zone? What is a barrier island?

What is an estuary? What is life like in an estuary? What is a salt marsh? What is the Mangrove Forest? How are the trees specially adapted to living in that environment? Why are they important?

Salt Marsh: coastland surrounded by seawater.

Mangrove: a mouth of large rivers.

Organism that for their homes in shallow water inside the shore

Barrier Island: Mainlands separate from water.

Temperate Ocean Zones

Trees have aerial roots. Important to thrive in blackish water.

Estuary: Enclose body of water. Transits fresh water to salt water.

11: Name and describe the different zones of the ocean and how they are divided. Describe the different photic zones of the ocean. What are kelp forests? Where are they found?

the pelagic zone. The neritic zone, epipelagic, mesopelagic, and bathypelagic zone. From the positions of the ocean. Top or bottom.

Sunlight: top layer

Twilight: sunlight in the depth

Midnight: No light.

Kelp forest: underwater areas with grand density of kelp.

Found in temperate areas.

Tropical Ocean Zones

12: What is coral made of? Explain. Where are most coral reefs located? Where is the largest coral reef?

Several thousands of organism. What makes a coral is a polyp. Located in warm waters. Tropical oceans near Ecuador.