

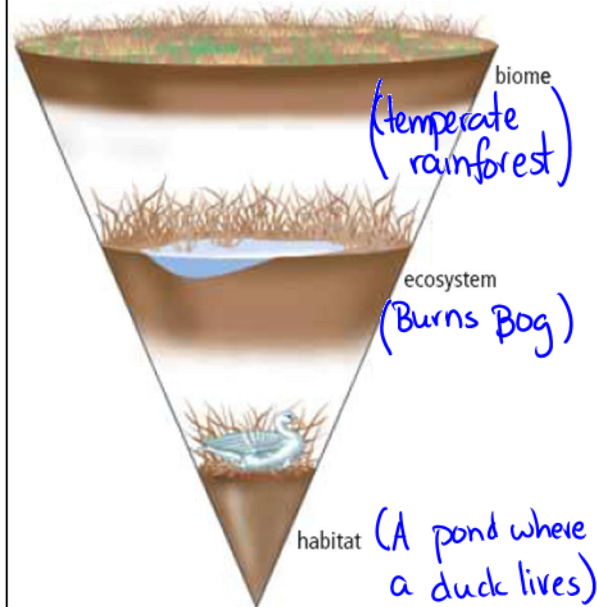
Biomes and Ecosystems

Science 10 Notes

BIOMES

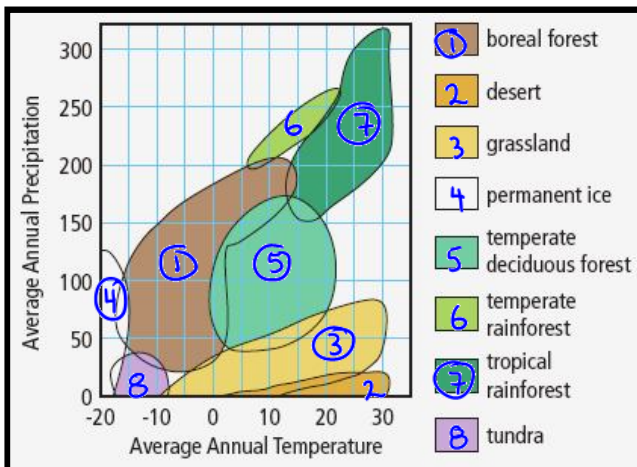
The "Biosphere" refers to anywhere on Earth living things exist.

- ♦ A biome is a region with similar biotic and abiotic components.
 - biotic = living things
 - abiotic = non-living things (air, water, soil, etc.)
- ♦ Biomes are classified based on many qualities, such as
 - precipitation (availability of water),
 - temperature,
 - interactions between biotic and abiotic factors.



Characteristics and Distribution of Biomes

- Certain characteristics help to identify biomes.
 - ♦ temperature and precipitation are two of the most important abiotic factors.
 - ♦ Other factors include latitude, elevation and ocean currents.



temperate rainforest,
- mild
- lots of rain.

tropical rainforests
- hot
- lots of water

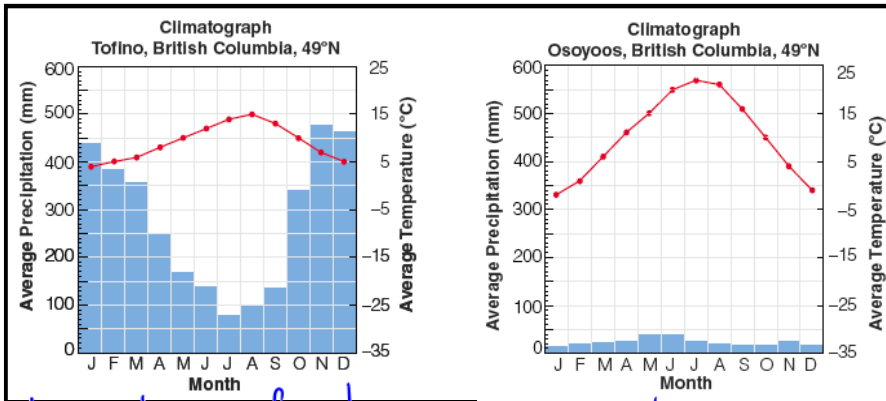
deserts
- hot
- dry.

boreal forests
- cold
- less water than BC.

grasslands
- pretty warm
- some water.

Climatographs

- A climatograph shows the temperature and precipitation for a location over a period of 30 years or more.
- biomes are often defined using information in climatographs.
 - ♦ Examine the differences between Tofino and Osoyoos



temperate rainforest.

desert,

Adaptations and Biomes

- Biomes are often identified with characteristic biotic factors.
 - ♦ For example, a scorpion, cactus in the desert, or a caribou, wolves on the tundra.
 - ♦ Often these organisms have adaptations for that biome.
 - ♦ An adaptation is a characteristic that helps an organism survive and thrive in their ecosystem.

1. physical/structural adaptation - a physical feature that helps an organism survive.
2. physiological adaptations - a physical or chemical event inside the organism's body that allows it to survive.

wolf - thick fur
- sharp teeth
- claws

wolf - good sense of smell.

3. behavioural adaptations - behaviours that help them survive.

- hierarchy.
- quiet
- hunt in packs.