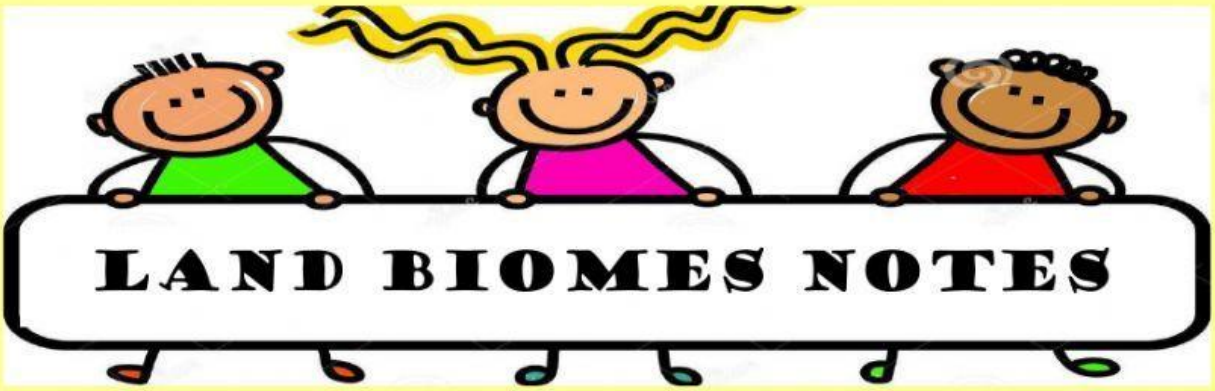
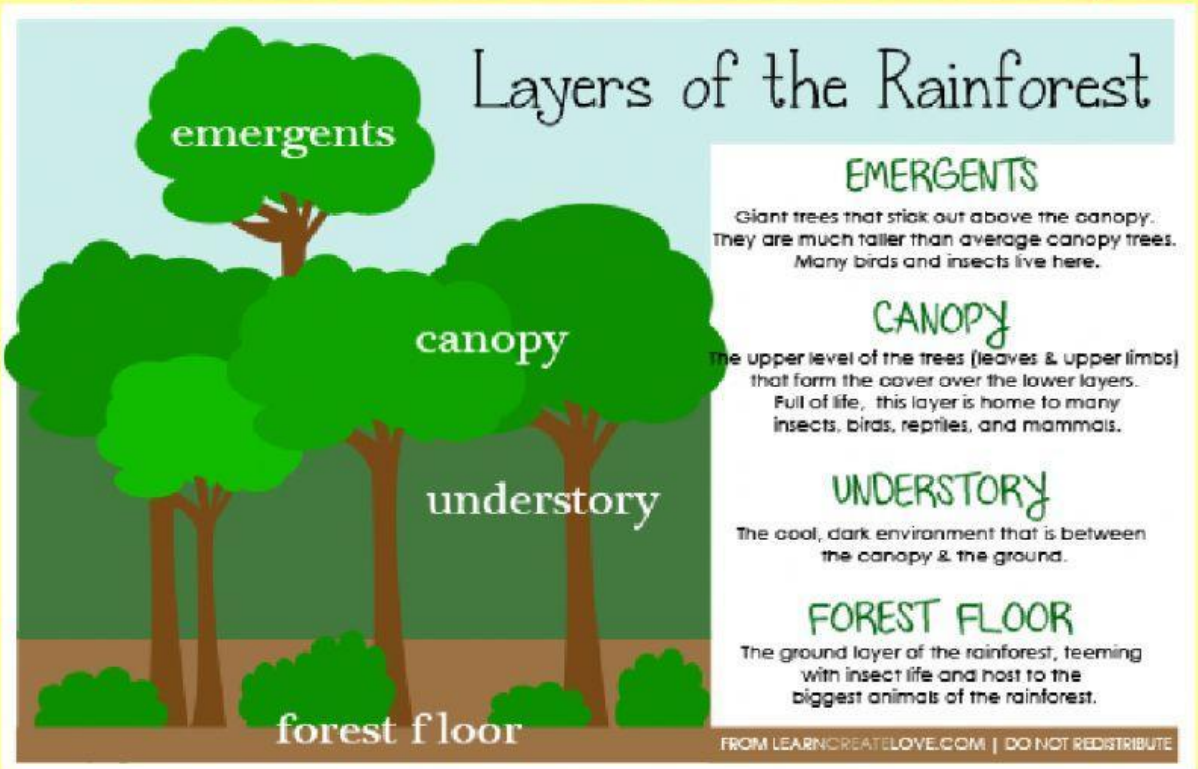


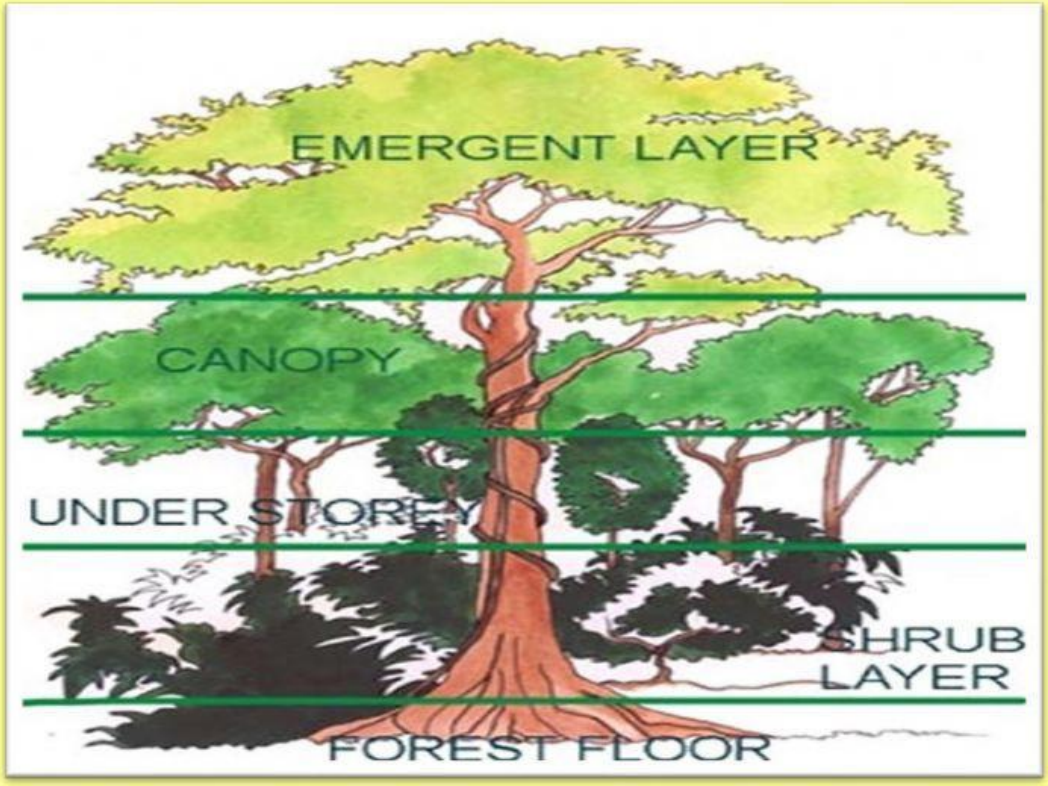
A **biome** is a large region on the earth that has a certain climate and certain kinds of organisms. There are six land biomes: **Tropical Rain Forest**, **Deciduous Forest**, **Desert**, **Grassland**, **Tundra** and **Taiga**.

TROPICAL RAIN FOREST



Tropical Rain Forests are noted for strong sunlight and a warm, wet climate which provide ideal growing conditions for a variety of plants and animals. Most plants and animals on earth live in the tropical rain forests. The Bahamas has a climate very similar to that of the tropical rain forests. Many insects, bats, birds and mammals live in the tropical rain forest. The plants in the rain forest are in four layers: **forest floor, understory, canopy and emergent.**

DECIDUOUS FOREST

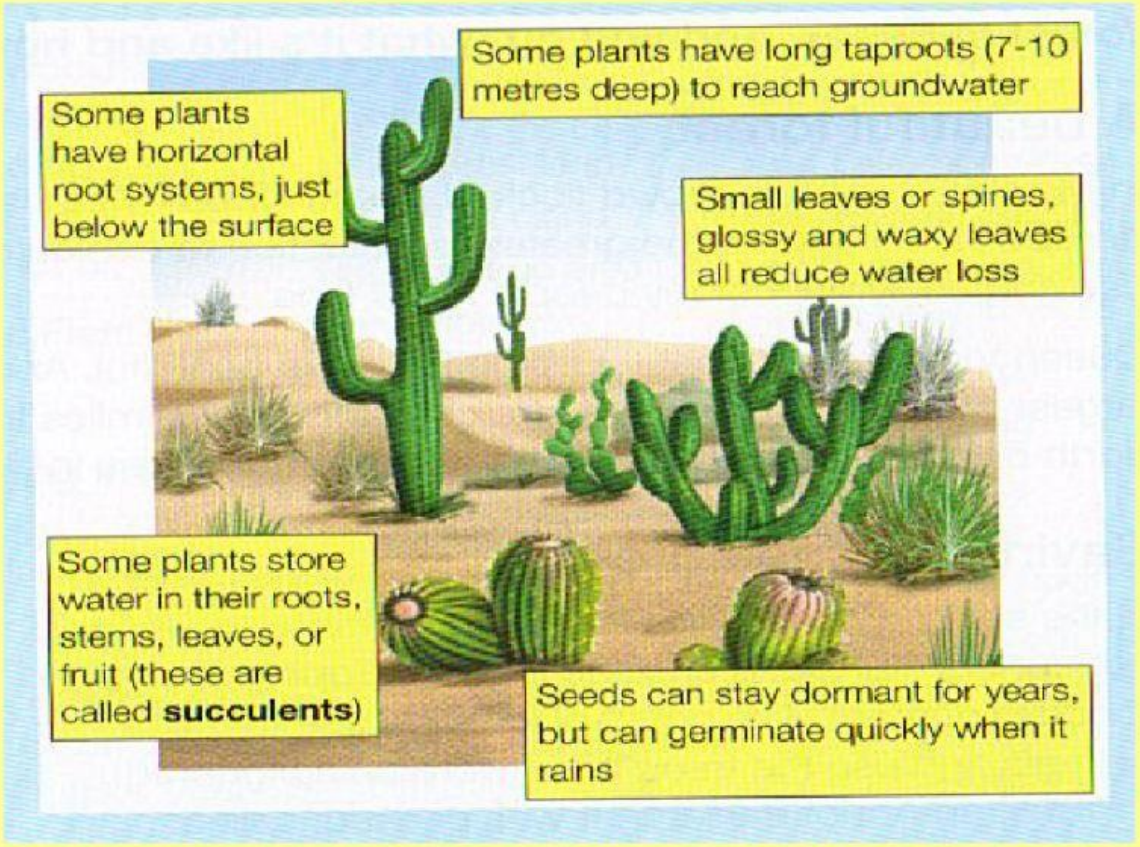


The Deciduous Forest has plants with broad leaves. The plants shed leaves every year and remain off the trees for almost three months during winter. Five layers of plants can be found in the Deciduous Forest. They are **forest**

floor, shrub layer, understory, canopy, and emergent layer.

A variety of plants and animals live in the deciduous forest. Some animals are squirrels, deer, rabbits and beavers, foxes, black bears hawks and snakes.

DESERTS



The desert biome receives very little rainfall. The rain that does fall evaporates quickly. During the nights, deserts are often very cold. Desert plants are adapted to survive with very little water. The common desert plants, cacti, store water in their thick stems. Plants such as the creosote bush have small, waxy leaves.

Desert animals also have adaptations to prevent water loss. Snakes and lizards have dry scaly, skin. Many desert animals hunt at night to avoid the heat. They are **nocturnal**.

Many desert animals are adapted for a tough life including camels, snakes, tortoise, birds, and other land-dwelling creatures. The camel is a fast-runner on desert and can go by several days without food and water. Most animals in these regions are nocturnal, they come out at night to avoid the heat. The Desert tortoise of the southwestern United States prefers living underground for the major part of the day. Wandering birds are often sighted.

GRASSLANDS

Grasses grow in wide, open spaces around the world. Large areas covered with grasses are called grasslands. Tropical grasslands grow close to the equator. Temperate grasslands grow in regions farther from the equator. Many different kinds of grasses grow on the world's grasslands. Grasslands may have no trees or only a scattered few. Usually the land is flat. Sometimes it has rolling hills. Dust storms, tornadoes, and wildfires sometimes rage across grasslands. Grasslands are good for grazing livestock. Grasslands also have good soil for farming. Wheat, oats, corn, and other crops have replaced many wild grasses.

The large animals that live in tropical grasslands include zebras, gazelles, lions, and kangaroos. Horses, antelope, hawks, and prairie dogs are a few of the animals that live in temperate grasslands.

Tropical grasslands are often called **savannas**. Africa, India, Southeast Asia, Brazil, and Australia all have areas of tropical grassland. The climate of savannas is extreme. Temperatures are high, and there are wet and dry seasons. During the dry season savannas get little rain.

The climate in temperate grasslands is less extreme. The **prairies** of North America are temperate grasslands. So are the pampas of Argentina, the **veld** of southern Africa, and the **steppes** of central Asia. The **bush** in Australia's southeastern corner are also temperate grasslands.

TAIGA

Taiga, also known as coniferous or boreal forest, is the **largest** land biome. It extends in a broad band across North America, Europe, and Asia to the southern border of the arctic tundra. Long, cold winters, and short, mild, wet summers are typical of this region. In the winter, chilly winds from the arctic cause bitterly cold weather in the taiga. Fire is not uncommon in the taiga during the summer. Fires may seem destructive, but they actually help this biome by removing old sick trees, making room for new growth.

This forest is covered with evergreen, or coniferous, trees. These are trees that don't drop their leaves, or needles, in the winter. They keep their leaves so they can soak up as much sunlight for as long as possible. The dark green color of their leaves also helps them to soak up more sun and gain more energy through photosynthesis. The conifers of the taiga produce their seeds in cones. They also have needles for leaves. Needles are good at holding in

water and surviving the harsh cold winds each winter. The trees also grow in a cone shape. This helps the snow to slide off their branches.

The animals of the taiga must be able to survive the cold winters. Some animals, like birds, migrate to the south for the winter. Insects lay eggs that can survive the winter and then die. Other animals, like squirrels, store up food for the winter while others hibernate by going into a long, deep sleep. Predators of this biome include the lynx, wolverines, Cooper's hawk, and wolves. Other animals include moose, the snowshoe hare, deer, elk, bears, chipmunks, bats, and woodpeckers. Animals that live here have certain characteristics that help them to survive:

- They generally have thick fur or feathers to keep them warm.
- Many animals have sharp claws and are good at climbing trees.
- They have large feet to allow them to walk on the snow without sinking.
- Many of them change colors from white fur in the winter, to help them hide in the snow, to brown fur in the summer, to help them hide in the trees.

TUNDRA

The tundra biome is the **coldest** of all biomes. It is also quite big. The tundra covers about one fifth of the land on earth. The word tundra comes from a Finnish word that means treeless plain, which is a good description of the biome. Tundra biome is located in the Arctic Circle, which is a circle that surrounds the North Pole. In Antarctica, and other cold environments, there are areas that can be described as part of a tundra biome as well.

Many lichens, mosses, and small shrubs flourish in the arctic tundra. The plants that live in the harsh permafrost soil usually adapt to the weather by being short and grouped together to resist winds and to be protected. Tundra plants get their energy from the sun through photosynthesis like all other plants, but have adapted to low temperatures and low light intensities.

Animals you might find here include lemmings, caribou, and arctic hares. The Polar Bear is the largest predator here. Polar bears love to eat fresh, fatty meat, they need the energy from fat to survive the cold tundra. Seals, at times walrus, and sometimes even belugas trapped in open water pockets surrounded by ice are some of the polar bear's favorite meals. They will also eat berries and eggs in the summer. Polar bears hunt by the power of scent and can smell their food at 20 miles away. The stomach of an adult polar bear is so big that it can hold more than 150 pounds of food! Other predators of the tundra are arctic foxes and wolves. Some migratory birds also live in the

tundra during part of the year. Some animals in the tundra are adapted to the climate by breeding and raising their young in the summer. Many animals hibernate, or sleep during the worst part of winter to minimize energy loss. Mosquitoes, flies, moths, grasshoppers, arctic bumblebees, and other insects are at the bottom of the arctic food chain. Many birds feed on these insects.

I have read my notes as least twice:_____