



Biomes



By: Ofir, Tal, Stephan, Jadon, Matthew

What is a biome?

A biome is what separates the earth into parts. Each biome has different climates. There are many different types of biomes. A couple of them are aquatic, forest, desert, tundra, and grassland. These biomes can be divided by the season and the climate.

-Matthew and Tal



Some of the plants in the more tropical biome: coffee, pepper, avocado, cocoa.

What are the different biomes on earth?

Tundra / Desert- As you may know the desert or tundra is very dry with little plants. But what you don't know that the arctic is also a desert. A desert is a barren wasteland that you would not want to live in because there is little water and food and the plants there need many adaptations to survive.



Tropical Rainforests- The rainforest is full of plants and wildlife. The rainforest is full of trees and has four levels: the rainforest floor, the understory layer, canopy layer, and the emergent layer.



Arctic- The freezing cold Arctic is not a place to live with freezing temperatures that can range from -34°C to 0°C . That's cold! Though the freezing cold temperatures would make it very difficult to live there there is a wide range of animals that live there. But since the ice they walk on is melting some animals that live there may go extinct.

Ofir



All the different plants in the greenhouse

Prickly Pear- they have flat fleshy pads that look like big leaves. These pads store a lot of water. They have very big spines.

Pincushion cactus- These cacti can only grow up to 6 inches in height. They can be ball or barrel shaped. They can tolerate some chilling temperatures.

Aloe Vera- It is very easy to care for. This plant can grow indoors and outdoors. It produces a slimy substance that is used in medicine. Aloe has been used around the world for centuries as nutritional supplementation and topical use. It's a natural source of vitamins, minerals, trace elements, and enzymes, all of which support healthy immune function, soothe and cleanse the digestive tract, and support the circulatory system.

-Jadon



All the different plants in the greenhouse 2

Avocado-The tree grows to 20 m (66 ft), with alternately arranged leaves 12-25 cm (4.7-9.8 in) long. The flowers are inconspicuous, greenish-yellow, 5-10 mm (0.2-0.4 in) wide. The pear-shaped fruit is 7-20 cm (2.8-7.9 in) long, weighs between 100 and 1,000 g (3.5 and 35.3 oz), and has a large central seed, 5-6.4 cm (2.0-2.5 in) long.

Coffee- From the Rubiaceae family, the coffee plant is a woody perennial that can grow over 20 feet in height. Typically though, they are pruned to around 8-10 feet. The fruit of the coffee plant is called a cherry. It is made up of outer skin, mucilage, parchment skin, silver skin, and finally two beans.

Cocoa plant-The harvested pods are opened, typically with a machete, to expose the beans. The pulp and cocoa seeds are removed and the rind is discarded.

Pepper- The bell pepper tops the list of foods with the highest levels of Vitamin C. A large red pepper provides more than 300% of your daily requirement of the nutrient; and has three times more Vitamin C than an orange.- Jadon

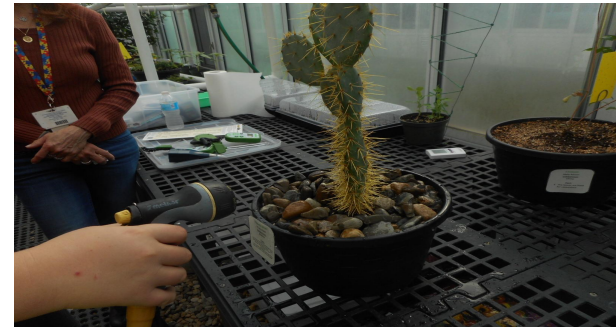
What did each person do in the greenhouse?

Every person in the greenhouse accomplished a job. We all took measurements, PH or power of hydrogen, watering plants, taking moisture, of the plants to see if all the plants are growing correctly for the: pincushion cactus, prickly pear, aloe vera, avocado, pepper, cocoa, and coffee, and some people including Stephan, Tal, Ofir, and Matthew cut the plants dead leaves off to keep the plants growing and healthy. We also gave water to the plants making sure not to drown them so they grow properly. These jobs were completed so the plants will become healthy and stay alive. -Ofir and Tal



We were cutting the all the dead leaves off the plants.

Jadon was watering the cacti.



Plants	3/24/17	3/27/17	4/19/17
Avocado #1	PH: 7 Temp: 59°F Measurement: 100cm	PH: 6.8 Temp: 66°F Measurement: 102cm	PH: 7 Temp: 64°F Measurement: 102cm
Avocado #2	PH: 6.1 Temp: 60°F Measurement: 93cm	PH: 7 Temp: 62°F Measurement: 95cm	PH: 7 Temp: 64°F Measurement: 97cm
Pepper	PH: 7 Temp: 55°F Measurement: 59cm	PH: 7 Temp: 58°F Measurement: 59 cm	PH: 5.5 Temp: 62°F Measurement: 60 cm
Cocoa	PH: 7 Temp: 69°F Measurement: 78cm	PH: 6.5 Temp: 66°F Measurement: 79cm	PH: 5.4 Temp: 66°F Measurement: 80cm
Coffee	PH: 7 Temp: 64°F Measurement: 36cm	PH: 7 Temp: 59°F Measurement: 40cm	PH: 5.4 Temp: 65°F Measurement: 41cm

Data Chart



-Stephan

Data

Plants	3/6/17	3/24/17	3/27/17	4/19/17
Aloe	PH: 7 Temp: 73°F Measurement: 32.5 cm	PH: 7 Temp: 73°F Measurement: 31 cm	PH: 6.8 Temp: 70°F Measurement: 31 cm	PH: 7 Temp: 74°F Measurement: 29 cm
Prickly Pear	PH: 7 Temp: 73°F Measurement: 43 cm	PH: 7.3 Temp: 73°F Measurement: 3 9 cm	PH: 7 Temp: 73°F Measurement: 39°F	PH: 7 Temp: 73°F Measurement: 40 cm
Pincushion Cacti	PH: 6.8 Temp: 73°F Measurement: 13 cm	PH: 7 Temp: 67°F Measurement: 12 cm	PH: 7 Temp: 68°F Measurement: 12 cm	PH: 7.3 Temp: 66°F Measurement: 12 cm

-Tal



What does the information mean?

-Ofir and Tal

Our measurements were good because the plants were always moist. If the plants had enough water it meant that it was growing properly which is what we wanted. The plants either grew a few centimeters, or stayed the same, which is normal. The plants stayed at a normal temperature and their PH, or potential hydrogen was 7 which meant the hydrogen level was good.



It was important to take the data every day we were in the greenhouse to make sure the plant was growing properly



We had to measure the PH, moisture, temperature, and measure the plant

And that's all you need to know about biomes

