

# Baker Botanic News

By Ms. Lety's Class

## In a garden far far away...

A group of gardeners rolled up their shirt sleeves and set out to bring our Baker Montessori School Garden to life! With the expert guidance of Ms. Lety, our budding botanists have learned how to plant, grow, and nurture a wide range of plants. We've been documenting our progress, observations, and opinions on all things flora. They didn't stop there. The class has also decided to share botanic research the junior scientists are digging up. Enjoy the first edition of the fruits of their labor!



Ms. Lety transplanting hibiscus plants into our garden with the help of the class.

## What is Botany?

By Cameron Wilson and Emiliano Smith



Cameron holding a hibiscus sepal.

Botany is the study of plants done by scientists to help us learn about Earth. We use botany in our class by measuring our plants and seeing what happens over time. We count the leaves and write down how many there are in our journals along with drawings.

Did you know the Earth has more than 80,000 species of edible plants? Thousands of plants are used for other things like medicine. Some plants even eat insects, like the Venus Flytrap. Also, 90% of the food we eat comes from just 30 plants! We know so much thanks to botany.



## Class Favorites

Poll taken by Peter Simpson and Josephina Martino

Rank	Plant	Votes	
#1	Mint	5	
#2	Hibiscus	3	
#3	Watermelon	2	
10/19 voted top 3			

## Whose Plants Have the Most Leaves?

Observations by August Schott

Plant	# of leaves
Skylar's Zucchini	34
Sebastian's Zucchini	38
Emiliano's Okras	26
Eve's Cucumber	13



Skylar's Zucchini



Sebastian's Zucchini.



Emiliano's Okra.



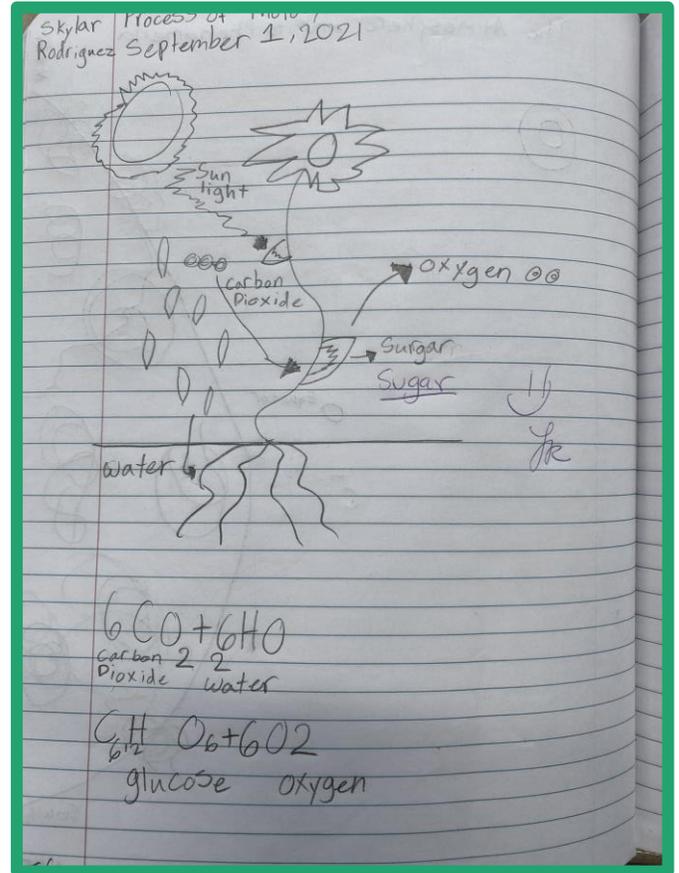
Eve's Cucumber.

# Photosynthesis

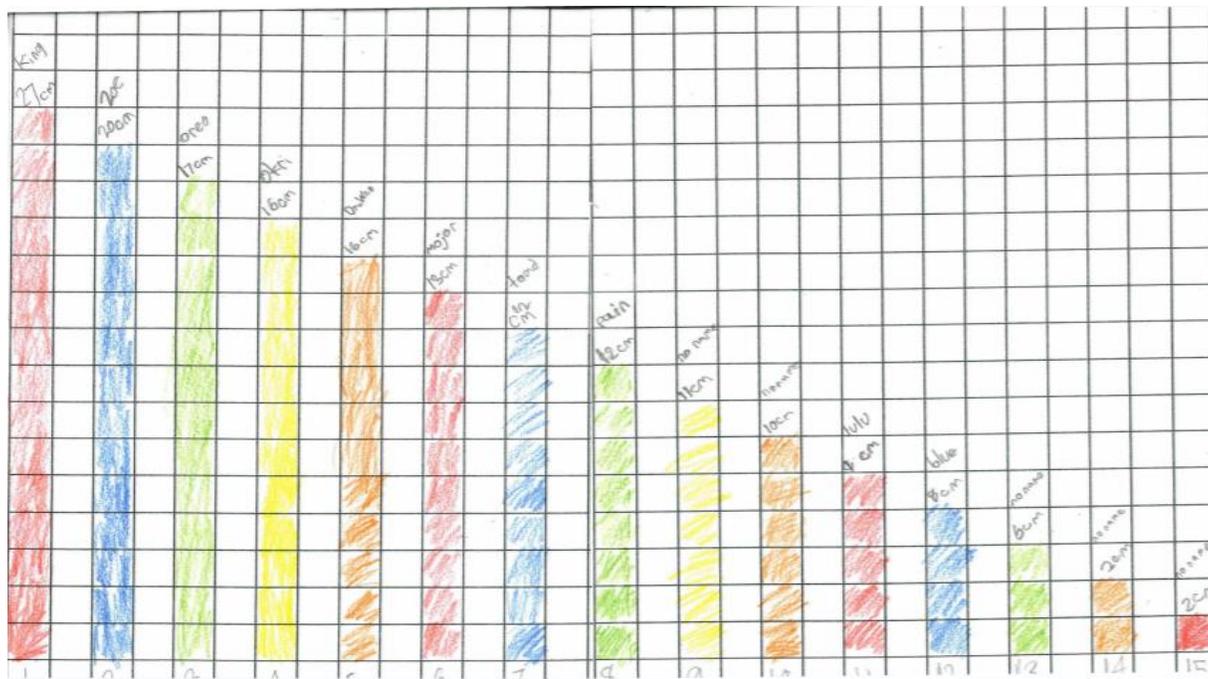
By Alec Baumgartner and Skylar Rodriguez

Photosynthesis refers to a set of chemical reactions in which energy from the sun helps change carbon dioxide and water into glucose and oxygen. Sunlight is most often harnessed by a green pigment present in all green plants and in cyanobacteria, responsible for absorption of light to provide energy in photosynthesis.

Photosynthesis happens when the plant gets sunlight, water, and air. Each one of these have their own special role. Sunlight gives the plant nutrients, the plant turns the carbon dioxide into oxygen, and the water will soak down to the bottom to the roots to help the plant grow.



# Plant Race By Sebastian Mendez and Joseph Riojas



A graph showing the measurements of the tallest plants in our garden as of October 1<sup>st</sup>.

## The Insects of a Garden

By Eve Cooper and Elise Soderstrom

Some of the most common bugs in a vegetables garden are beetles, aphids, ladybugs, flies, bees, ants, mosquitoes, butterflies, crickets, and dragonflies. Some of these insects are good for a garden but some are not.

Some of the bad insects include aphids. They are not harmful, but they cause the leaves to wilt and curl in a short amount of time. Ants are unwelcomed pests because they help to protect other garden pests. White flies can injure a plant by sucking the juices from the plant. If it sucked enough juice from the plant, the plant could die.

Some of the good insects are ladybugs. Ladybugs are a good sign because that means there are fewer pests. Ladybugs often feed on bad pests such as aphids, sinch bugs, asparagus beetle larva, and so on.

Just like ladybugs, spiders feed on bad pests and they help when it comes to plant damage. Bees and butterflies are good because they are pollinators which means they bring pollen from one flower and sprinkle some on another.

## Ants in Your Garden?

By Jack Woodward and Asher Freestone

Some ants are helpful to a garden's ecosystem by spreading seeds and breaking down organic matter. However, ants like fire ants will actually eat your plants.

Some people try to deal with ants by hosing the hill with water. However, this might not be affective to a fire ant hill. Also, they can rebuild the hill since that person did not deal with the ants properly.

Here are some ways to get rid of ants:

- You can use peppermint spray, jalapeño pepper juice, or red pepper flakes because ants hate the smell.
- Use hot water on anthill.
- Making a mixture of soap and water to cover the anthill.



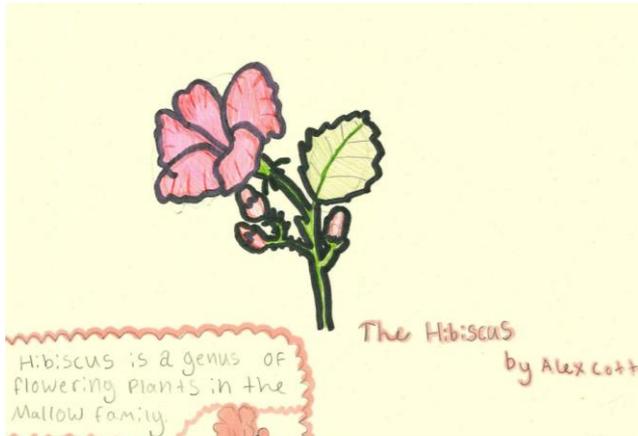
An ant hill near our garden beds.



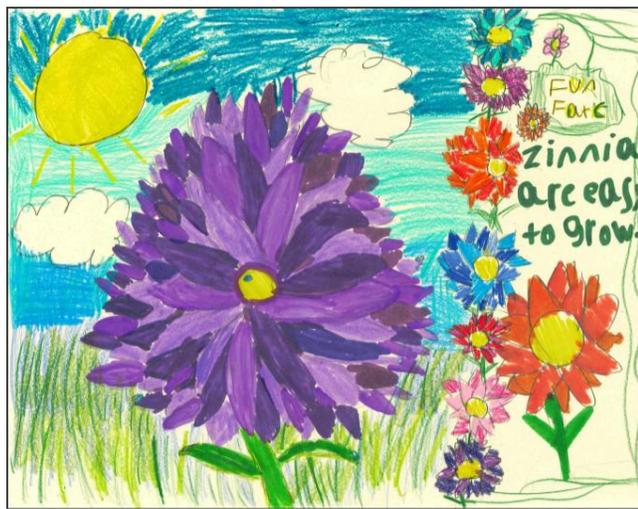
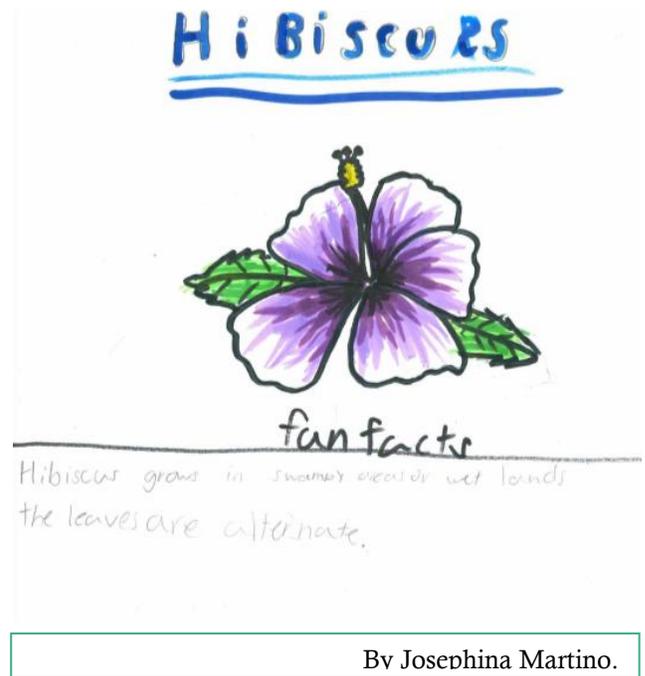
A friendly worm found in the garden bed while putting in a new plant.

## Flower Observations

By several botanic artists.



By Alexandra Cotton.



By Isabel Haugstad.



By Isabel Haugstad.

# Mindfulness with Plants 101

By Alex Cotton & Zoe Eaton

Hello, welcome to this week's edition of mindfulness with plants. When we first did mindfulness with the plants, it was fun. This week we are going to tell you some benefits and tips.

Benefits of plants in mindfulness:

- 🌱 Our plants keep the balance of our atmosphere.
- 🌱 Plants give us oxygen, which is very, very, very, important.
- 🌱 Not only human beings, but the main source of food for most animals is plants.
- 🌱 Plants keep the temperature in control like with the weather.
- 🌱 Plants help give us clean water in our households to drink when thirsty.

Favorite tip for plants in mindfulness:

You can sing to your plants! Singing to your plants is good for plants **and** you. You are helping your plants grow by letting out carbon dioxide when opening your mouth to sing. In return, the plant will give you oxygen and nutrients. When we have our plants for mindfulness time, we do breathing exercises on them.

That's it for this edition of mindfulness with plants.

## The Garden Song by David Mallett

Comments by Vlad Rusu

Inch by inch, row by row, gonna make this garden grow  
All it takes is a rake and a hoe and a piece of fertile ground  
Inch by inch, row by row, someone bless these seeds I sow  
Someone warm them from below, 'til the rain comes tumbling down

Pulling weeds and picking stones, man is made of dreams and bones  
Feel the need to grow my own 'cause the time is close at hand  
Grain for grain, sun and rain, find my way in nature's chain  
Tune my body and my brain to the music of the land

Plant your rows straight and long, temper than with prayer and song  
Mother Earth will make you strong if you give her love and care  
Old crow watching hungrily, from his perch in yonder tree  
In my garden I'm as free as that feathered thief up there

Inch by inch, row by row, gonna make this garden grow  
All it takes is a rake and a hoe and a piece of fertile ground  
Inch by inch, row by row, someone bless these seeds I sow  
Someone warm them from below, 'til the rain comes tumbling down



The Garden Song helps your plants grow for many reasons:

1. While singing this song it produces CO<sub>2</sub> for your plants. When you give your plant CO<sub>2</sub>, it gives you oxygen.
2. When you sing this song it brings your plants happiness 😊 When your plant is happy it produces more and more oxygen every day.
3. It also encourages your plants to grow big and strong! When your plant is big and strong you will be able to eat it or admire its beautiful flowers.

Thank you!



## Editor's Note

Thank you for reading! I hope we sparked an interest in gardening in you too. We also hope to have actual fruits and vegetables by the next issue! Feel welcome to stop by the garden next time. A special thanks to Principal Salvador, the Garden Club, and the PTO for making this possible.

