# **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! In this month's issue, the class experienced their first harvest! We got busy in the kitchen making delicious hibiscus tea and cucumber salads. Our junior botanists also got extra creative with their story telling. Enjoy!



Lettuce boats made with cucumbers from our garden.



# Garden Life Poem By Ainexey Snyder and Joseph Riojas

The garden's life is really special to us.

We grow lots of fruits and veggies.

They grow every day, and they are really strong.

The plants get bigger, and we are not wrong.

Every Monday we observe all the big and beautiful plants.

Every day before lunch we go out to look for ants.

When it's Friday, we give the plants lots of water.

The garden has lots of plants, and I hope we grow much more.

### The Cotton Plant

# By Alex Cotton & Zoe Eaton

Have you ever wondered "How is cotton made in fabric? "or "Why are cotton flowers different colors?" Well, you came to the right place. We're going to tell you about the cotton plant, why the flowers are different colors, and how cotton is made into fabric.

The cotton plant is mainly grown in Southern America, Uzbekistan, China, India, and Egypt. The cotton plant is known for its fabric for clothing. You might be wearing a cotton shirt right now. The cotton plant grows like a bush like in Ms. Simone's Garden. The cotton plant then grows flowers, something quite interesting is that some flowers are red, and some are white! Here I will tell you why. The reason is that the cotton flowers bloom a yellowish white color, then the pollen sheds and the following day they turn a reddish pink and begin to fold up. The day after that, they fall off the plant and, if the pollination was successful, the immature cotton ball begins to form. So that is why the flowers are white and red.

Now, we are going to talk about how people make cotton into fabric. Once the cotton is plucked carefully, debris like seeds, burrs, dirt, stems, and leaves is removed. The cotton then goes through many cleaning machines and packed tightly into bales that are processed into textiles. After that the next step is to spin the cotton. The woven fabric called gray goods is sent to the finishing plant where it gets bleached, preshrunk, dyed, printed, and given a special finish before being made into clothing or products for the home.



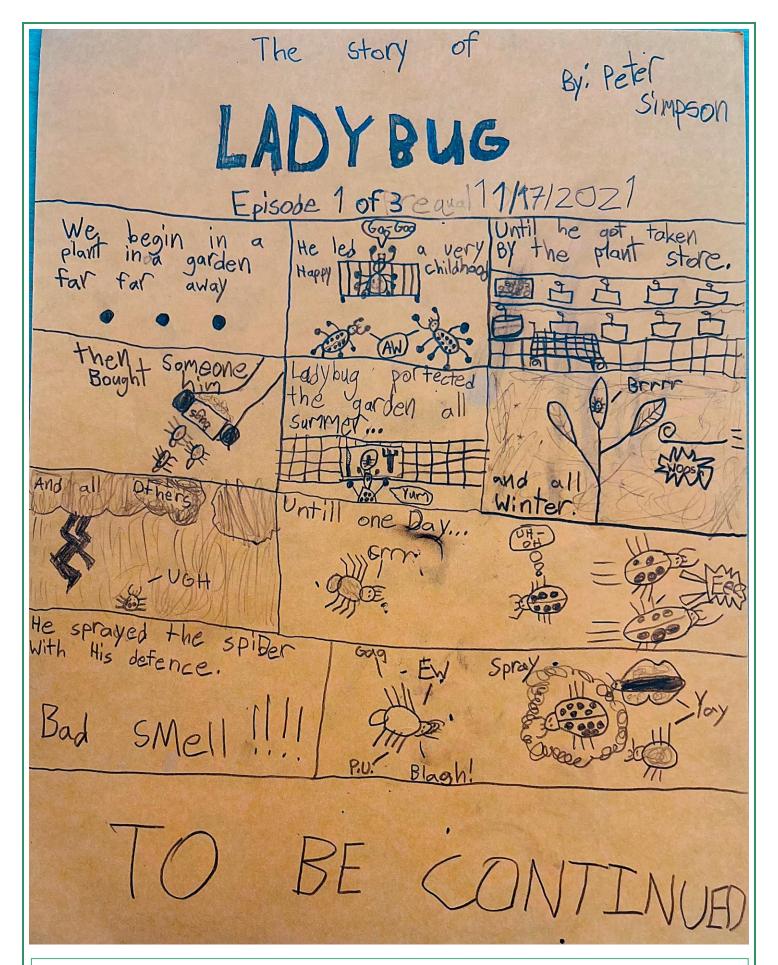












# Dr. Who

# By Eve Cooper

It all started from one little cucumber seed. Just one little seed created something massive. Something two times as big as me but let's not get ahead of ourselves. Hi. My name is Eve, and I am in Ms. Lety's class. So, towards the beginning of the school year, Ms. Lety (my lovely teacher) was teaching us all about gardening. She taught us about how plants get nutrients and sunlight, what type of measurements to use to see how much they have grown, and the parts of the plant which are the roots, stem, leaves, flower, and fruit. Most plants make fruit. So, after she had told us all about those awesome facts, she taught us how to grow plants. Yes, I know it's awesome. Ms. Lety is just an awesome person.

Anyways, one day during the afternoon work cycle, she gathered us all in the living room (the space outside our room) and provided us with some cups and soil and told us to fill the cups with the soil. So that's what we did, we filled the cups with soil two thirds full. Once we were done, we placed them on one of the tables we have and since it was time for recess, we had to clean up the classroom for the end of the day. The next day during the morning work cycle, Ms. Jess (Ms. Lety's lovely assistant teacher) took us to the living room to plant a seed in our little cups. The two I chose were the Hibiscus seed and the cucumber seed. The reason I chose these two are because Hibiscus is my favorite flower, and I chose cucumber because it's one of my favorite vegetables. Once I got my seeds, I planted them in my little cups, watered them, placed them by the windowsill, and named them. Ms. Lety spray painted some pieces of wood, and I wrote their names on them, so I knew which plants were mine. I named them Dr. Who (my cucumber) and Lily (my Hibiscus).

As they grew, I recorded my observations in my journal. A few weeks went by, and I started to see seedlings. Every day I sang to them during mindfulness. The song I sang was called "The Garden Song - John Denver". A couple more weeks went by and Dr. Who started getting a little too big for the cup, so I had to move him into the garden.

I made sure to water him every day. Every day he got bigger and bigger. Then, my dad got sick, and I missed a few weeks of school, so I don't know what happened while I was gone but it was definitely good because he was a foot taller than me! He had so many flowers and was surrounded in butterflies, bees, and ladybug larva. A few more weeks went by, and he had the biggest cucumbers I've ever seen! We harvested some for the class, and some for me. One day, his cucumber was my lunch! I thought that was just the coolest thing because my very own plant provided me with food for the class, and some of the teachers! Man, I can't tell you how delicious he was with Tajin. It was just the perfect combination.

After a few more weeks, it was Thanksgiving break and I guess Dr. Who caught a disease because when I was watering him, I noticed something different about his leaves and when I looked closer, I saw a bunch of white spots. Ms. Lety thought it was fungus and told me to cut off all the infected leaves, so I did. It turned out to be all the leaves so that's how he's doing now but I think he'll be ok. Lily is still 3 cm tall, so I don't think she'll be joining the garden soon. It has been a wonderful adventure taking care of my plants and I encourage you to make your own garden. Once you've had the experience, you won't look at your food the same. It's hard work but it's worth it. If you already have a garden, that's just fantastic! The squirrels got to my home garden. I really hope you enjoyed hearing about Dr. Who.

Sincerely - Eve

# Dr. Who Cucumbers

By Vlad Rusu and Eve Cooper

Cucumber	11/1/2021	11/8/2021	11/15/2021
Α	5 cm	6 cm	8 cm
В	3.5 cm	6.5 cm	Harvested
С	5.5 cm	8.5 cm	Harvested
D	5 cm	8 cm	Harvested
Е	4.5 cm	5.5 cm	7 cm
F	2 cm	3 cm	5 cm
Gigantor	6.5 cm	9 cm	Harvested
Humungo	8 cm	10 cm	Harvested
I	7 cm	8.5 cm	Harvested
J	5 cm	6.5 cm	Harvested
K	7 cm	8.5 cm	Harvested
L	5 cm	10.5 cm	Harvested
M	3.5 cm	4.5 cm	5.5 cm
N	8 cm	11.5 cm	Harvested
0	2.5 cm	3 cm	4 cm
Р	2.5 cm	3.5 cm	4 cm
Q	2 cm	2.5 cm	8 cm
R	1 cm	6 cm	7.5 cm

The table above are measurements of only some of the cucumbers the plant named Dr. Who has grown. The fruit was harvested once it was around 10 cm long or bigger.





Eve and Vlad writing their observations on Dr. Who.

# Garden Club

### By Jack Woodward

Garden Club, also known as The Baker Botanic Club, meets every Tuesday and Thursday at 7:30 am in the gardens. Anyone can join although most of the kids are from Ms. Lety's class. We are making our garden organic so we will not use any chemicals or pesticides and we don't wax our fruit or vegetables.

Some projects are super fun. We built a spider web made of dark blue and orange colored yarn. It's for our cucumbers to climb on. The web is attached to our Cucumber cages. Inside the cages are our cucumber plants: Dr. Who and The Cucumber Forest. We started harvesting the biggest cucumbers. Mrs. Newberry helped us make a cucumber salad called Ensaladang Pipino. It was made with cucumbers, fish sauce, limes, and chicken, then placed on a lettuce leaf. We are waiting for the potatoes to sprout so we can plant them. Ms. Lilia donated the worm farm so we can give our plants the nutrition they need. The worms eat food scraps that we don't eat. They mostly eat fruit and veggie scraps, but they also eat eggshells and newspaper scraps. The water that drains from the bottom is used to water our plants. We also use banana water to give our plants nutrition. We collect Hibiscus sepals to make tea and gummies.

On rainy days we stay inside and watch a movie. Today we are watching The Big Little Farm. It's about these people who want to build an organic farm but keep having to deal with problems. We have problems with ants, so we use clay that is grinded up into powder to kill the ants. One of the most important things in Garden Club is that everyone has a good time!



Some members of the Garden Club.



Mrs. Newberry making Ensalladang Pipipino



Jack harvesting sepals.

# Hibiscus Tea Recipe By Eve Cooper

#### Ingredients:

- 6 limes
- 3 cups of dried sepals
- 2 cups of sugar
- 1 gallon of water

Harvest the Hibiscus sepals that are bigger than your thumb. We recommend Roselle Hibiscus because we think they are most flavorful. Let them dry for four days. Once dry, gather your sepals and put them in a large water filled pot and boil it. Once the water starts boiling, switch off the flame and cover your pot. If you want, you can add herbs such as basil, lemongrass, lemon zest, mint, and so on. Add your sugar and squeeze your limes into the water. Then, let the tea steep for 15-20 minutes. Pour the tea over ice and enjoy your delicious tea!

# Hibiscus Gummies Recipe

By Elise Soderstrom

# Ingredients:

- 1 cup of Hibiscus sepals
- 3 cup of water
- 2 TBSP Honey
- 4 TBSP Gelatin powder

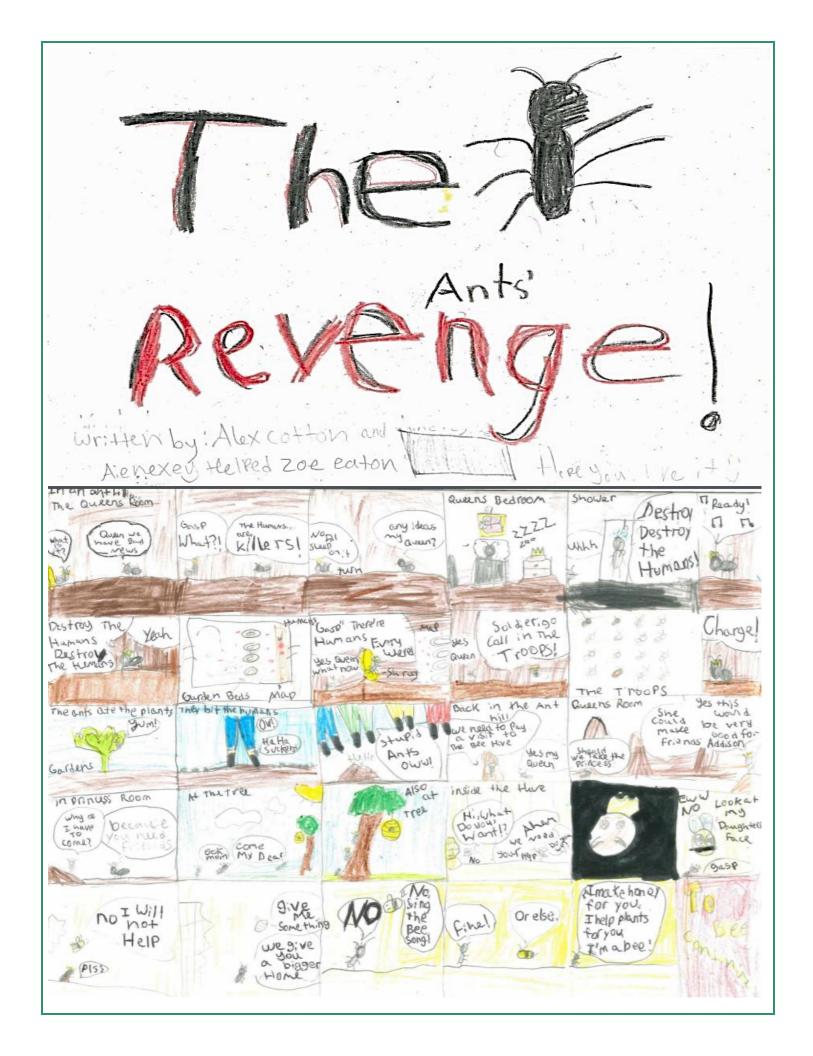
What you are going to need to do is put the Hibiscus sepals into 1.5 cups of water and bring the water to a boil. Once you see bubbles and steam, take it off the burner. Pour your gelatin powder into the water and stir for two minutes until completely dissolved. Repeat step with your honey. Then, drain the water into a bowl and mix in 1.5 cups of cold water. Sprinkle gelatin powder into the silicone mold, then pour in your mixture. Put it in the fridge for 20 minutes then enjoy your gummies.







The first time the students made Hibiscus Tea with dried sepals from the garden.



# Mindfulness with Plants 101

# By Alex Cotton & Zoe Eaton

Welcome to another edition of Mindfulness with Plants. We will be guiding you through breathing exercises you can do with your plants. The first one is called "Calming down with your Plant." Bring your plant over to you and practice your box breathing. After you finish your box breathing, (Box breathing is when you breath in for a certain number of seconds, and breath out for the same amount of time) start to take deep breaths. Imagine your plant growing tall, strong, and delicious. Your plant is giving you health.

How do you feel? Do you feel calm or stressed? If you're calm, great, but if you're stressed, maybe you need to do one more exercise. This next one is called "Flower Breath". Sit down cross-legged with your plant in your lap. Imagine yourself as a flower that just bloomed. Now, breathe in the air around you and breathe out. Raise your arms and spread them out like you're soaking in the sun and water.

Now you feel calm. Last, but certainly not least, this is a summary of a study about how plants make you more mindful. There are a few things you can do.

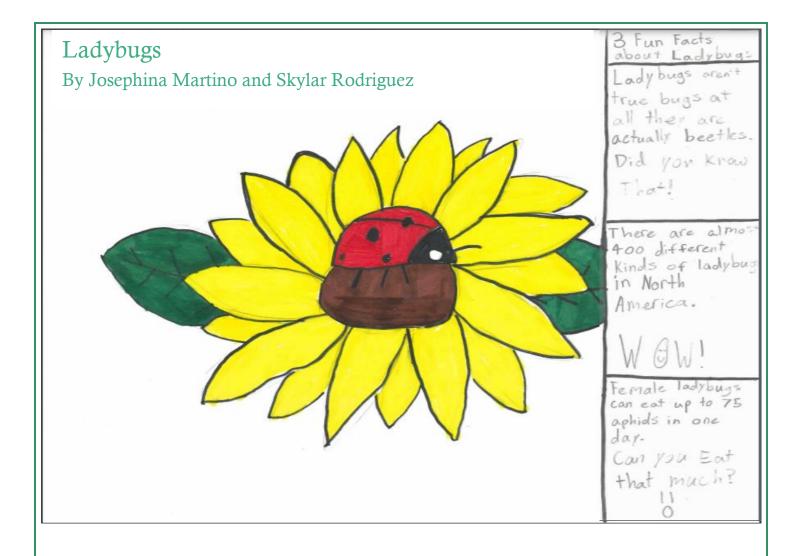
- Taking some of the time out of your day to appreciate your plants.
- Celebrate if your plants flowers or grows fruit or veggies.
- If you have a house plant, breathe the air around you and say thank you for the air your plant cleans.
- Put plants in every room in your house to bring the outdoors inside.
- Cherish the moments you have with your plants.

Remember to stay mindful with your plants. Tree you later!

# Garden Weather

# Reporters: Asher Freestone and Cameron Wilson

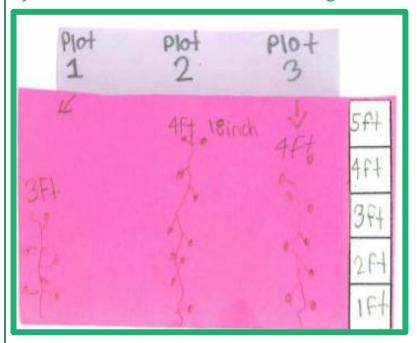
Hurricane Nicholas made its way to Houston as a tropical depression on September 15th. This caused a lot of rain. Our classmates were worried about our plants in the garden. Some of our plants survived, and some of them didn't including my okra but my friend Peter rebirthed it. Rain is mostly good because plants need it to grow. Don't let the weather affect your plants too much, though, because too much rain can kill your plant. Plants can be hurt by hot weather too. When your plant leaves get droopy it means they're probably getting overheated. Cold weather freezes the plant cells. Most plants freeze when it's 28 degrees Fahrenheit. You can protect your plants by providing some shade or cover depending on the season.



Most ladybugs have circle and oval shaped bodies with six short legs like our drawing. Depending on the species, they can have spots, stripes, or no markings at all. Birds, frogs, wasps, spiders, and dragonflies eat them. However, ladybugs are colorful to tell predators: "I taste bad don't eat me." When threatened, the bugs will release a wet, bad tasting spray. A type of poisonous black ladybug is called a Pine Ladybird you can have allergic reactions and they are very toxic. Ladybugs lay their eggs on the underside of a leaf, usually where aphids have gathered. This is so they have plenty of food when they hatch into larva. Most people love ladybugs because they are pretty and harmless to humans. But farmers love them because they eat aphids and other plant eating bugs. We love having them in the garden for the same reason. Aphids are pests that eat the leaves of our plants, so the ladybugs are like pest control. One ladybug can eat up to 5,000 insects in its whole lifetime! Ladybugs are most active from spring until fall. When the weather turns cold, they hibernate, or go to sleep, in rotting logs, under rocks, or even inside houses.

# Hibiscus Plant Measurement

# By Sebastian Mendez and Julian Rodriguez



A chart showing the height of the three Hibiscus plants as of 11/10/21.

The Hibiscus plants in the Baker Botanic Garden live happily. It happened one day early in our pro farmer journey. Our wonderful teacher brought us these big Hibiscus plants, which looked very sad when first put into our garden beds. Since getting them, they haven't really grown much in height since they were mostly grown already. We water all the plants two times a day, give them nutritious banana water, trim infected leaves, and write down our observations.











The students got to plant Hibiscus seedlings thanks to the seedling planters Mr. Dang Le was generous enough to donate!







# Editor's Note

Thank you for reading! I hope we sparked an interest in gardening in you too. Feel welcome to stop by the garden next time. A special thanks to Principal Salvador, The Garden Club, and the PTO for continuous support. We would also like to thank the amazingly supportive parents and friends who are helping cultivate the students' love for gardening by donating time and resources!





