

Lucy's Planting Science Journal

March 22, 2018- Today we updated our info. We also planted our seeds. We started by taking them out of the water they soaked in last night. We cut five of them in half to make ten halves. We also removed the outer shell off of ten of them and kept ten as they are. We then planted them two per cup. We planted them in $\frac{3}{4}$ cup of soil. We planted them 1 inch deep with two seeds in the hole. We then gave them $\frac{1}{2}$ inch of water. They will receive $\frac{1}{2}$ inch water every Monday and Thursday.

-Lucy

March 26, 2018- Today we watered our plants. We also saw some sprouts so we measured them. The average of all the full seed plants is 1.4 centimeters. The average of all the half seed plants is .2 centimeters. The average of all the seeds without an outer shell plants is 1.3 centimeters. There were no leaves on any of them. We found the average by measuring the ones that grew and then added them together. We then divided that by five because there are five cups.

-Lucy

March 27, 2018- Today our plants had grown a little more. The average for the full seed cups is 3.7 cm. The average for the half seed cups is 1 cm. The average for the cups without the outer shell is 2.45 cm. We also created a data table today.

-Lucy

March 29, 2018- Today we watered our plants. They have grown quite a bit since yesterday. Some of them have some leaves growing to start. The growth is below.

Full- 10.1 cm

Half- 1.1 cm

W/O- 4 cm

-Lucy

March 30, 2018- Our plants have grown a lot. Today was very uneventful, we measured our plants. The growths are as follows.

Full- 12.7 cm

Half- 1.2 cm

W/O- 6 cm

-Lucy

April 2, 2018- Today we watered our plants. They are starting to droop over and we are thinking about holding them up with popsicle sticks. Some of the half seed cups are not absorbing water like they usually do. The water just sits on top of the soil. The measurements are below...

Full- 24 cm

Half- 1.3 cm

W/O- 7.2 cm

-Lucy

April 3, 2018- Today our plants are still drooping. We have not put popsicle sticks to keep them up yet. There is still that one cup that did not soak in the water from yesterday. Measurements below....

Full- 27.3

Half- 1.4

W/O- 10.6

-Lucy

April 5, 2018- Today we measured our plants. We also watered them. That one plant still isn't taking in water. We still have not put up popsicle sticks yet.

Full- 32.5

Half- 1.7

W/O- 11.9

-Lucy

April 6, 2018- We put up popsicle sticks on the plants that need them. All of the growing plants are very green. Some of the bottoms are a little red. The full seed plants are quite droopy. The one half seed plant is not drooping. The without outer shell seeds are less droopy but also less tall. All of them around the same color green though. Averages are...

Full- 34.4

Half- 1.7

W/O- 12

-Lucy

April 9, 2018- Our plants are quite droopy. There is only one growing in half still. There is still a cup that isn't taking in water in the half seeds. The plants have started to look kind of sad.

-Lucy

April 10, 2018- The plants are really droopy. They are green but the shade is a little less bright. The popsicle sticks are up but i don't think we tied them up enough. There are lots of leaves that are drooped down on

all of them. There is only one sprouted in each cup of the without outer shell seeds.

-Lucy

April 12, 2018- We watered our plants today. The plant that is not taking in water has started to smell. We poked holes in the bottoms of all of our cups because apparently the seeds started rotting. We let the water drain and put the cups back on the table. Mrs. Buzzell told us to poke the holes. The fact that we didn't poke holes in the bottom to start was definitely a design flaw. Some of the plant leaves are a bit red on the underside. A few of the plants have darker green leaves. The stems of our plants are extremely thin. The leaves are causing them to droop over even with the popsicle sticks holding them up. Since the beginning of this project the plants have grown quite a bit but they also are very droopy. We updated our mentor and checked in with Mrs. Buzzell, as well.

-Lucy

May 3, 2018- Our experiment is officially over. We came up with our conclusion. Our hypothesis was partly correct. The seeds that contained the entire embryo did indeed grow. The half seeds didn't grow because the entire embryo was not intact. The seeds might not have grown because we didn't poke holes in the cup for water to drain out so they may have drowned. We think that maybe because they were smaller seeds, they could not absorb the water as easily as the others. Also we think that we may have made a mistake when we were measuring the plants towards the end because the height average went down. Our half plants did not grow but one, our without outer shell seeds grew mostly one plant per cup, and our full seeds grew mostly two plants per cup. Our hypothesis wasn't the best and detailed but it was correct mostly.

-Lucy

Here is our graph.....

