



Science Virtual Learning

2nd Grade Plants Need Water

April 7, 2020



2ND GRADE SCIENCE
Lesson: [April 7th]

LEARNING TARGET:

Students will identify basic plant needs.
Students will record data.



BACKGROUND: This is a new skill for 2nd grade.

- ❖ 1st: Use materials to design a solution to a human problem by mimicking how plants use their external parts to help them survive, grow, and meet their needs.
- ❖ 2nd: Plan and conduct investigations on the growth of plants when growing conditions are altered.

ENGAGE:

- ❖ Let's remember the parts of a plant! [Click to watch the video.](#)
- ❖ Do you know how to grow a plant? [Read this book to find out!](#)

Plants Need Water



Do All Plants Need Water?

Two friends are talking about the needs of plants. Which friend has the best idea about plants and water?



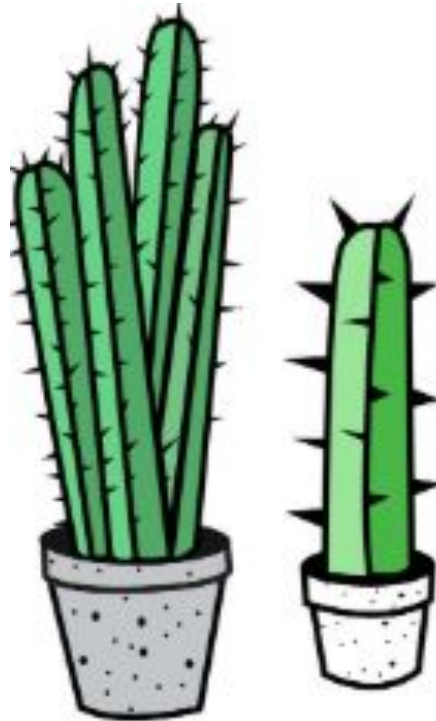
Isabella: I think all plants need water.

Faye: I think most plants need water. There are some plants that do not need water.

Explain your thinking.

ENGAGE

Do all plants need water?



Who do you agree with? Do you think Isabella is right or do you think Faye has the best thinking?

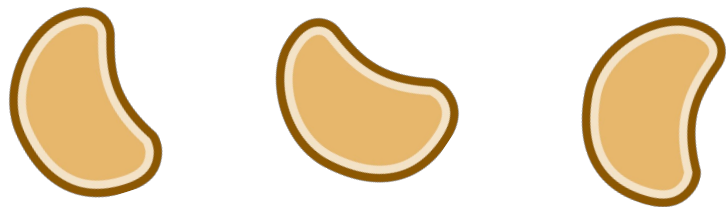
Write down your answer in a notebook, write it on a post it, or tell someone in your house!

ENGAGE What do you see in this photo?



EXPLORE

Let's do an experiment to see who was right!
Do seeds need water to grow?



Can a seed begin to grow in a plastic bag?

Make a Prediction Will a seed begin to grow in a plastic bag with or without water?

Make a prediction!

I think seeds will grow in a bag with water because

_____.

I think seeds will grow in a bag without water because

_____.

I think seeds will grow in both because _____.

GATHER THESE MATERIALS IF YOU WANT TO FOLLOW ALONG



Cup of water

Spoon

2 paper towels, napkins, or tissues

Marker

2 bags

2-6 ANY beans (lima, sunflower, pumpkin, beans)

EXPLORE

Let's do an experiment to see who was right!
Do seeds need water to grow?

STEP 1. Fold each paper towel into quarters (fold in half two times!). Put two spoons of water onto one of the paper towels. Put the wet towel into a bag and label it "**water.**"



EXPLORE

Let's do an experiment to see who was right!
Do seeds need water to grow?

STEP 2. Put the dry paper bag into the other bag and label it "**no water.**"



EXPLORE

Let's do an experiment to see who was right!
Do seeds need water to grow?

STEP 3. Put 1, 2, or 3 seeds in each bag. Seal the bag and put in a sunny place!

I like to tape mine into the window!



EXPLORE

Use the handout in your packet to record your data!

RECORD DATA.

Observe the seeds every day for 5 days. Record your observations by drawing and labeling in each box.

	Day 1	Day 2	Day 3	Day 4	Day 5
Water					
No Water					

Your page in your packet looks like this!

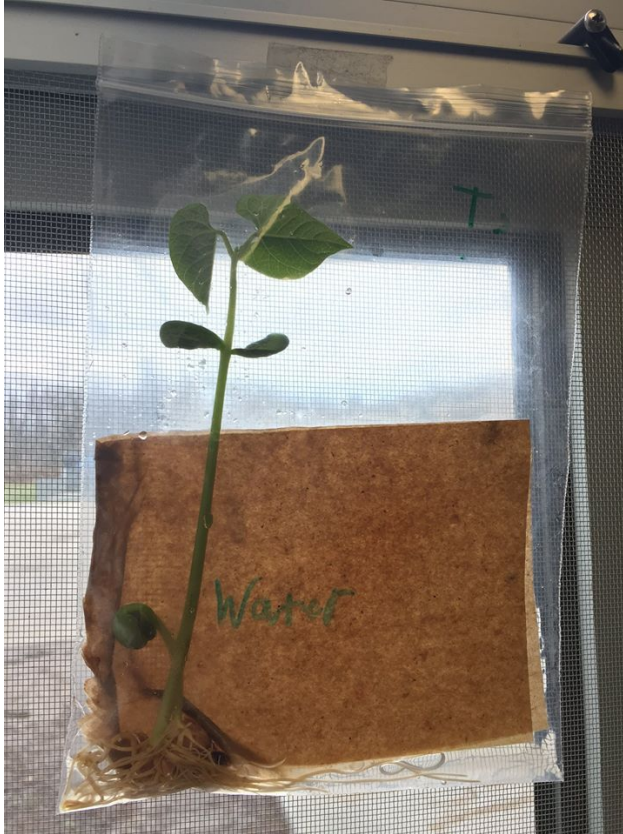
Communicate Information

1. Did any of the seeds change? How?

2. Why do you think the seeds changed?

EXPLAIN

Did you find this out too? Plants **NEED** water!



**The water plants
are growing!**

Which direction
did they grow?
Do they like being
in the sun?

**The no water
plant did not
change.**



EXPLAIN

Let's look at how the plant with water grows!

1. Watch the seed grow! [Click here to watch a time lapse video of a seed growing.](#) Seeds do not really grow this quickly! We sped up the video so you could watch it happen.
2. Once the seed grows a stem, we can watch it grow above ground! [Click here to continue to watch it grow.](#)

EXPLAIN

There is a special part of the plant that helps collect the water. Do you know what it is?

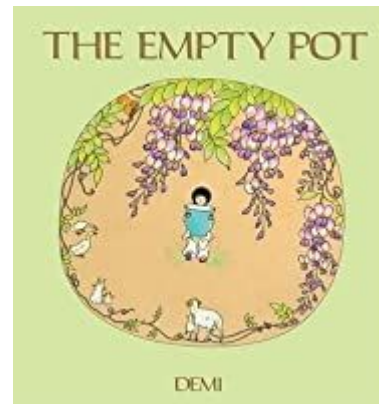
Click the plant to find out which part it is and learn more about it!



When you are done learning about the special part, [listen to this read aloud](#) to see how the hare uses what he knows about plants to trick the bear!

ONLINE ELABORATE

[Click here to go to Storyline Online to listen to the Chinese folk tale!](#)



What did the seeds need to grow?

Why didn't Ping's seed grow like all the other kids? What did Ping's plant need that it did not get?

Try this at home!

Take a seed and bake it in your oven. See if you can make it grow!

ONLINE ELABORATE

See if you can make the plant grow! You will have to use everything you know about what plants need. [Click here to try!](#) Press GROW then use the levers to change the water and heat.



**What a Plant
Needs to Survive**

If you are having
trouble
remembering
everything they
need, listen to this
song!

TRY AT HOME

Celery Experiment!

Put what you know about plants needs and roots to the test!

1. Trim the bottom of a celery plant. Leave the leaves on!
2. Place it in a cup of water with leaves sticking out.
3. Drop some food coloring into the water.
4. Leave for a day or two and see what happens!



Where do roots take the water?

Can you see where water travels inside a plant?



SELF CHECK:

Go tell someone in your home your answers.

How did you do on this lesson?



What is the part of the plant that takes in water?

What are 2 things plants need to survive?

Find a plant outside and see if you can find some of the parts!