



Science Virtual Learning

2nd Grade Grass Heads

April 08, 2020



2ND GRADE SCIENCE
Lesson: April 8, 2020

LEARNING TARGET:

Students will identify cause and effect by working with one variable at a time.

Students will identify basic plant needs.



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

- ❖ Students learn what plants need to grow in Kindergarten.
- ❖ Students learn the parts of a plant and how the parts help the plant survive in 1st Grade.
- ❖ Students plan and conduct investigations on the growth of plants when growing conditions are altered in 2nd grade.

ENGAGE:

Look at this [photo](#).

What do you notice? What do you wonder?

EXPLORE

We did an experiment and planted two seeds. We labeled one seed, “light” and one seed, “dark box.” We are giving them both water.



Which seed will grow?

Why do you think that?

EXPLORE

After 4 days, we see that both seeds sprouted!



What could you say is the ONLY thing plants need to SPROUT?

We decided to put the seeds back in their spots, one in the light and one in the box, for 2 weeks. We kept giving them water. **Predict what will happen to the plant in the light compared the the plant in the dark.**

EXPLORE

What happened to the plants after 2 weeks?



What is the difference between the two plants?

Does one look healthier?

How do you know?

Why do you think the plant in the **dark** grew taller?

EXPLORE

After 2 more days, the plant in the dark ended up shriveling and dying.



Why did the plant die?

Why do you think that happened?

EXPLORE

We decided to repeat the experiment, but do it differently.



What do you think will happen to the plant in the box?

Will it be able to find the light?

EXPLORE

After 2 weeks, look what happened to the plant in the box!



Why did the plant grow like this?

Why is the plant so long?

EXPLORE

Think back to the first experiment.

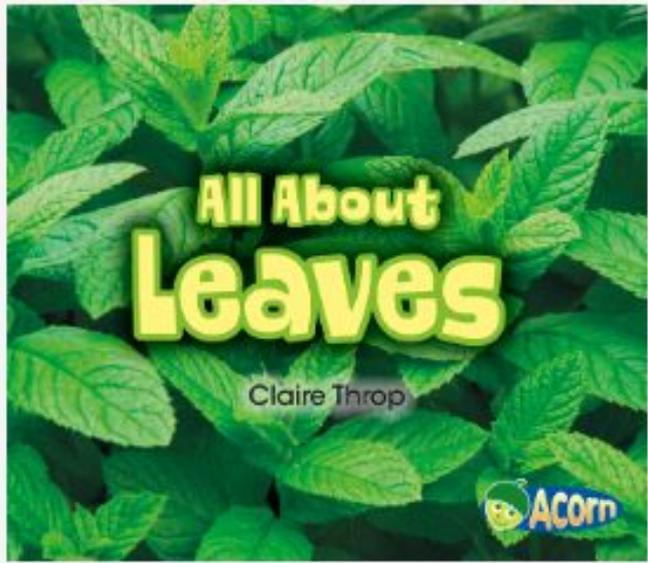


Why did the plant in the **dark** grow **taller**?

What was the plant trying to **reach**?

EXPLAIN

What is the job of leaves?
[Read this to find out!](#)



Pebble Go Log In:
Ask your teacher for
your log in!

Watch this video!



What can you tell us
about plants after
watching it?

EXPLAIN

Now that we know plants grow towards the _____, why did that tree we first looked at get so tall?



What was it trying to **reach**?

How could you explain why plants grow a certain direction?

TRY AT HOME

1. Make a prediction.

If I want the hair (grass) on my grass head to grow straight UP, how would I position my grass head?



Face Up



Face Down



Standing Up

TRY AT HOME

Follow these steps if you want to follow along at home!

You need:

2 paper towels

Popsicle stick

3 rubber bands

Pen

Grass seed

Plate

Cup

Old tights/nylon stocking



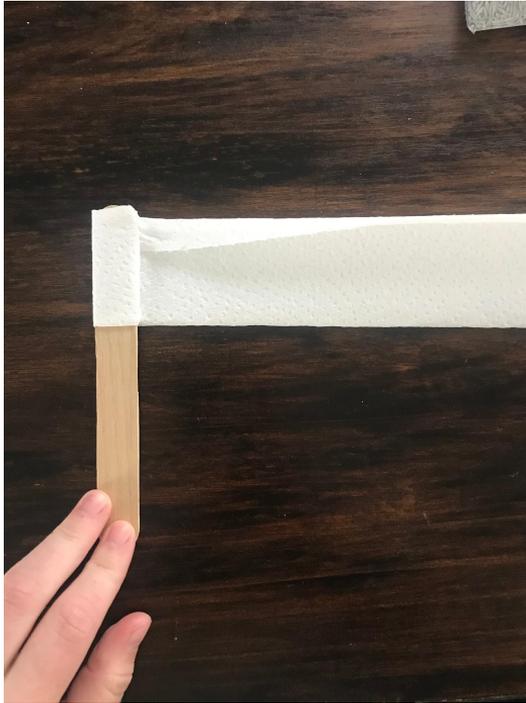
TRY AT HOME

Take 1 paper towel and fold it about two inches.
Continue to fold it over until you have a long, thin strip.



TRY AT HOME

Roll the popsicle stick around the paper towel.
Tie a rubber band around it.



TRY AT HOME

Place the second paper towel over the stick.
Tie it down with a second rubber band.
Make sure one side is smooth.



TRY AT HOME

Use the pen to draw a silly face on the paper towel. Be gentle!

Dip the head into a cup of water.

Let it drip for a second or two before taking it out of the cup.



TRY AT HOME

Dip the head into the grass seed.

Only press the seeds where you want hair to grow.



TRY AT HOME

You may need someone to help with this step.

Stretch the stocking wide and put your grass head inside.

TIPS:

Pull the stocking tight and down, making sure if there is stitching at the top, it is pulled down lower below most of the seeds.



TRY AT HOME

Use the third rubber band to tie the stocking in place.



TRY AT HOME

Think about which direction you want the grass to grow. Look at the 3 placements. Which placement will the hair grown grow **straight up**, **straight forward**, and **straight back**?



Face Up



Face Down



Standing Up

TRY AT HOME

Using what you know about how plants grow TOWARD THE LIGHT, how will you place your grass head?



Face Up



Face Down



Standing Up

PRACTICE

Complete this page in your packet.

Grass Heads

I can identify cause and effect by working with one variable at a time.

Date: _____ Name _____

Grass Head Name: _____

Draw how you set your grass head
(face down, face up, straight up).



Draw your prediction of how your
grass will grow.



Wait until the grass grows.

Draw what happened to your grass
head.



What caused the grass to grow like
that?

The grass grew _____

because _____

You can complete this page on how you do your grass head or how you *would* do your grass head.

PRACTICE

Cause and Effect

Using the words, cause and effect, can you explain what happens to plants?

Cause: why
it happened

Effect: what
happened

Light _____ plants to sprout.

Plants growing taller to reach
the light is an _____.

ONLINE ELABORATE

Go to this website:

[Read this article: National Geographic Kids Redwoods](#)

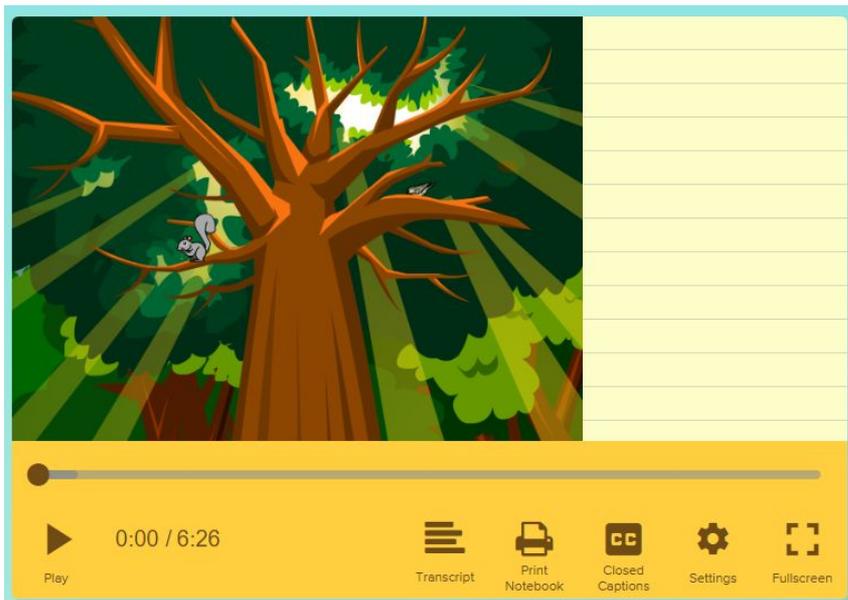


How tall can redwood trees grow?

What causes them to grow so tall?

ONLINE ELABORATE

Watch this [Brainpop video](#) on trees!
Then play this [vocabulary game](#).



How are the parts
of a plant the
same as the parts
of trees?



SELF CHECK:

Go tell someone in your home your answers.

How did you do on this lesson?



Can plants sprout without light?

Can plants survive without light?

What part of a plant collects the light?

Can you find any plants outside or in your house reaching for light?