

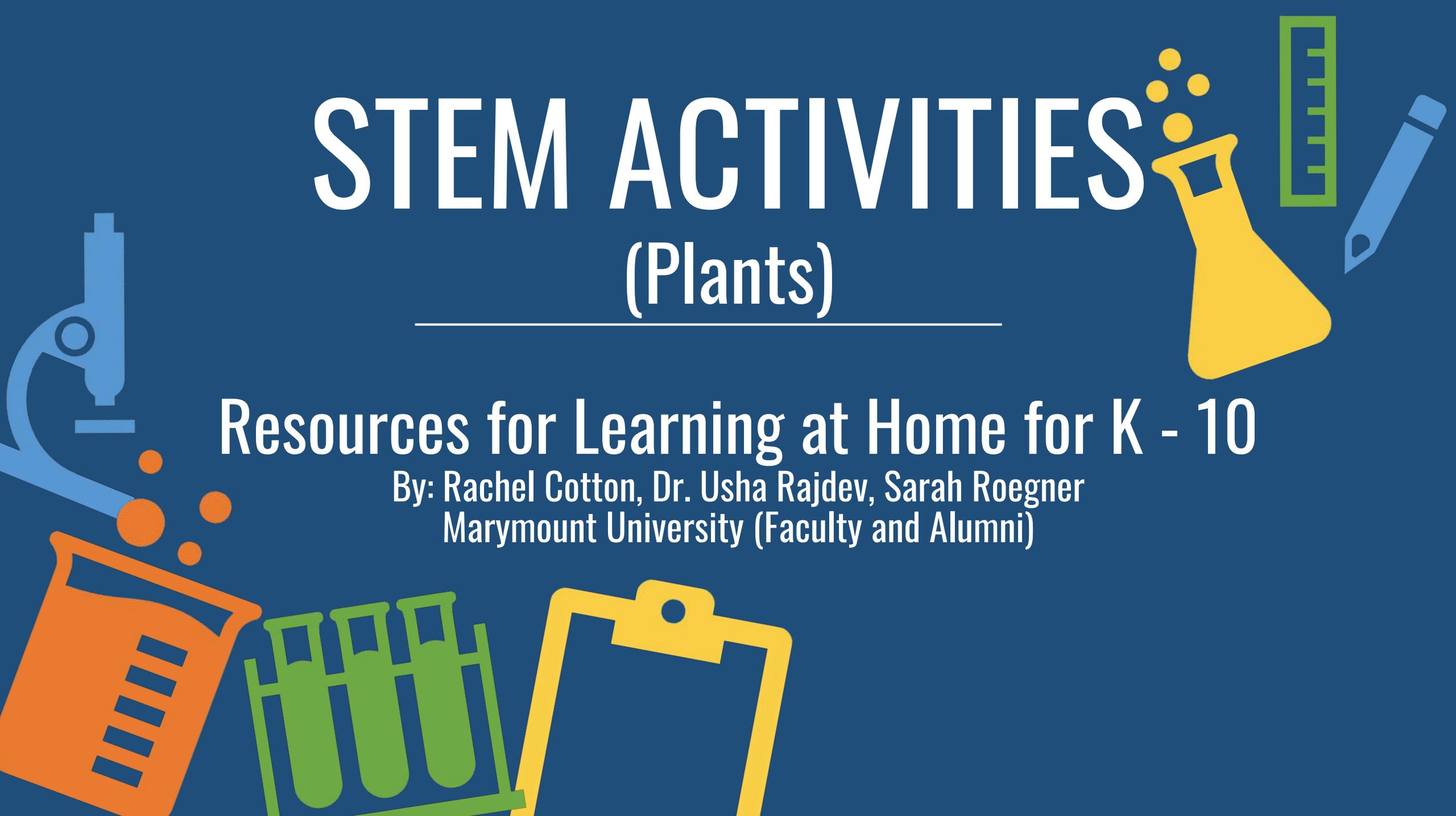
# STEM ACTIVITIES

## (Plants)

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Resources for Learning at Home for K - 10

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# Remember... Safety First!

Before attempting any experiments or hands on activities, make sure you have parent permission and are following all safety instructions! Remember science is not fun if you get hurt because you are not being safe!



# Parents

Dear Parents and/or Family members:

In an effort to continue teaching and learning under the current COVID19 circumstances, we recognize the needs for parents, families, and students to conduct a variation of activities to enhance and motivate students learning from the homefront. **Please note some will require adult supervision. We leave this to your discretion.** Do try other grade levels for challenges.

This particular packet focuses on plants. Try these hands-on, interactive lessons and activities to learn all about plant parts, conditions, adaptations, pollination, etc.

Stay tuned for more activities and projects to follow.



# RESOURCES BY GRADE

Click on the box with your child's grade to go to resources for that grade level.

K

1-2

3-4

5-6

7-8

9-10

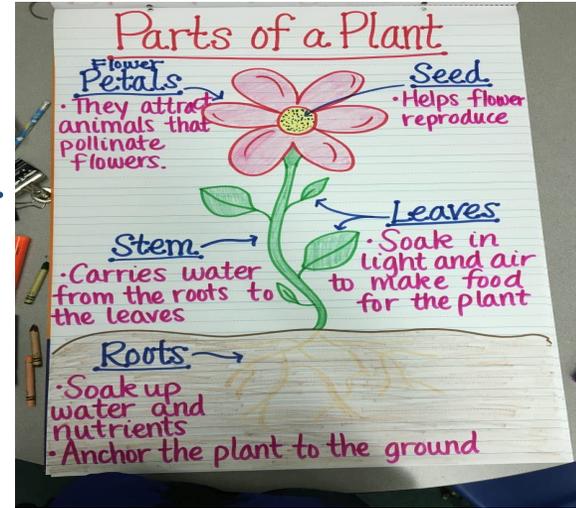


# Kindergarten

## Activity

Learn about the parts of a plant.

- Listen to the read aloud [Plants Can't Sit Still](#).
- What does a plant need to grow?
- Draw your own flower and label the parts like the example.



Grow your own beans in a ziplock bag.

- Watch the [video](#).
- Place one or two beans in each of the wet cotton balls.
- Place them in a ziplock bag, seal the bag, and tape it to a window.
- Observe daily. Do not water it anymore.
- Ask: Why? Do you see the roots? Is it sprouting? Can you now plant it in a pot or your garden with soil?

Try out one of the other [Creative Activities](#).

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# First-Second

## Websites & Activities

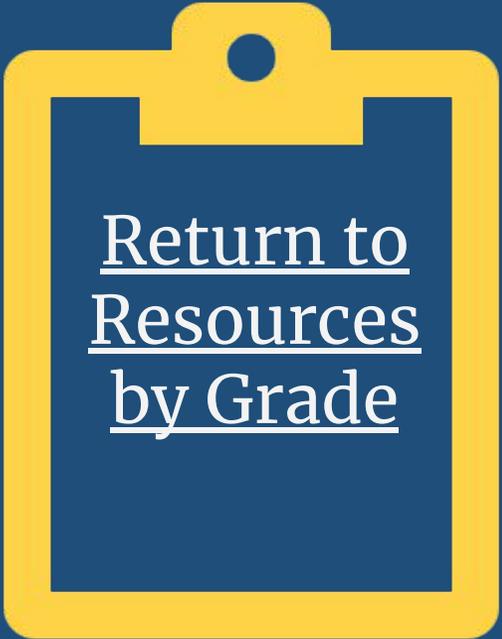
Listen to this read aloud book [From Seed to Plant](#).

Try this [Changing Celery Activity](#) at home.

- You can use white flowers/celery/peeled cucumber cut lengthwise, cauliflower with stalk, or even coffee filters cut lengthwise.
- If you do not have food coloring try dipping a marker and test it out? Did it work? Why? Why not? You may need to observe this for a few days before you see any results.

Try this [Plant Conditions Experiment](#).

- You can replace cups for pots.
- Complete the [chart](#). Analyze your lunch/dinner. What plant foods did you eat each day?



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# Third-Fourth

## Websites

- Learn about five of the [World's Wildest Plants](#). Each plant has adapted to its environment in very peculiar ways.
- Expand your knowledge with [Supermarket Botany](#) and categorize common foods according to the part of the plant from which they come.
- Learn [All About Rainforests!](#) From plant life to the temperature to the soil. Even explore the animal and indigenous people that inhabit the rainforests.

## Activity

Learn all about the parts of a flower and do a hands-on activity.

- Watch the video on [Parts of a Flower](#).
- Read a little more about [Flower Anatomy](#) and review the vocab using the [Illustrated Glossary](#)
- Dissect your own flower and use this [video](#) as a guide to help you.
- “[Test Yourself](#)” after you finish dissecting your flower.



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# Fifth-Sixth

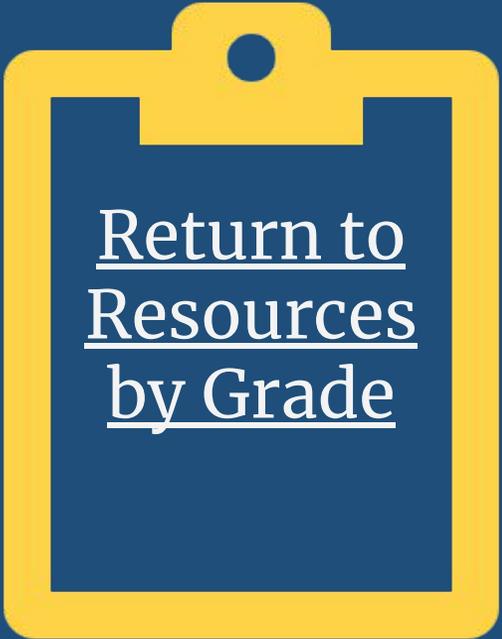
## Websites

- Expand your knowledge on plants by working through one of the activities on the [Plant Webpage](#).
- Try out one of these [experiments](#) in your own home.
- Check out the plant growth that NASA has been collecting on [Climate Kids](#).
- Go through the slideshow on [Plant Cells](#) to learn what makes up plants. Learn about the basics of [Plants](#).

## Activity

Just like animals, plants are grouped in different ways and have to adapt to their environments.

- Watch this introduction video on the [Plant Kingdom](#). Learn about the characteristics and classifications.
- Now watch the video on [Plant Adaptations](#).
- Categorize the plants in your community. Do they have adaptations?



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# Seventh-Eighth

## Website

- Watch this video to learn about [climate change](#).
- Read this article to get some background information on how [climate change alters plant growth](#).
- [Can trees tell us about climate change?](#) Read the article to find out!
- Try to keep the Earth in balance while playing [OFFSET!](#)
- Make [exploding seed balls](#) to give to friends!

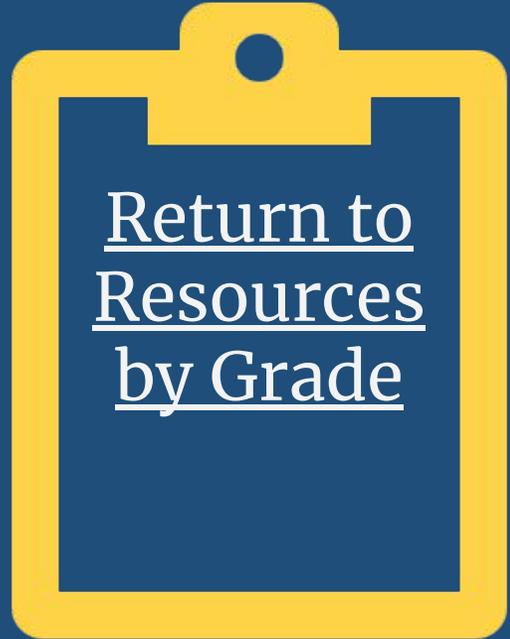
### **VA Standards of Learning connection:**

LS.9 The student will investigate and understand how organisms adapt to biotic and abiotic factors in an ecosystem.

## Activity

Climate change is a big topic in the world today. Learn about the impact climate change has on plants so you can be better informed on the topic.

- Try your hand at creating a [terrarium mini-garden](#) or a [container garden](#). The activity will depend on the space you have available to you and materials you have at home.
- How could you apply the success of your garden to a larger scale that would benefit climate change?



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# Ninth-Tenth

## Website

- Watch this video to learn about the [different parts of a cell](#).
- [How do flowers and bees help each other?](#) Read the article to find out!
- [What is happening to the bees?](#) Watch the video to find out.
- This [picture slideshow](#) gives information about “murder” hornets.
- [Why do we need bees?](#)

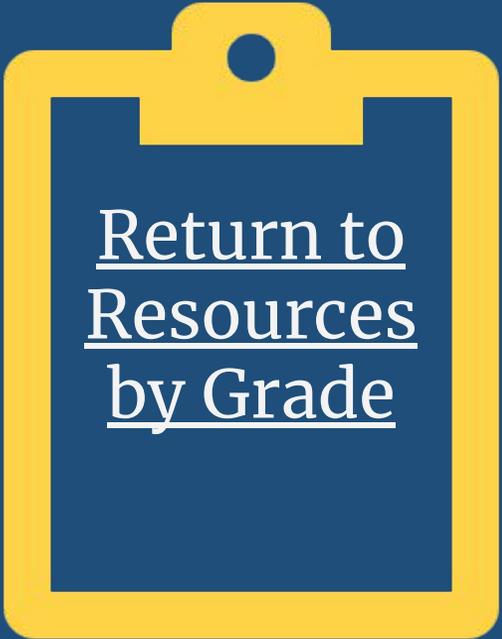
### **VA Standards of Learning connection:**

The student will investigate and understand dynamic equilibria within populations, communities, and ecosystems.

## Activity

Bees are not only important to plants they are also important to humans and the environment.

- With the invasion of “murder” hornets and other harmful species, bees are dying out.
- **Design** a garden that would attract bees in your area. Use this [website](#) to help your planning.
- **Create** a model of your proposed garden or plant the garden yourself!
- **Share** your findings with the community.



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