Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences—particularly students of color and girls—by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at www.projectexploration.org/stemathome.

In this activity, you will:
explore the life of a botanist or gardener and start your own garden in the kitchen using few materials. You will be able to understand the importance of a plant scientist and how we can improve our lives using what nature has provided!

Supplies Required:

- Paper egg carton
- Scissors
- Vegetable or flower seeds (cucumber or dill)
- Gardening soil
- Water
- Spray bottle

Video
Listen to In the Garden with Dr. Carver before completing the activity: https://tinyurl.com/sxdrk6x

Overview
Botanists are experts or students in the scientific study of plant life; including their structures, properties, textures and how they relate to the earth. In the story we learn that Dr. Carver is a botanist who loved to take care of the earth, and use the earth's resources for a better life. Building and planting a garden is also a great way to practice engineering and the design process. Using a spray bottle if you have one, you'll water your seeds everyday, because the soil needs to stay moist. Once you're done planting your seeds, you'll want to place it near a warm area where there is natural light, like the window sill. Once your seeds begin to sprout you can ask an adult to help you move it outside. You will cut out your egg carton cup (which should be very wet and saturated) and place it directly in the soil. It will break down into tiny parts and become a part of the soil! Watch your seeds grow!
Instructions

1. Remove the lid from the egg carton.
2. Have an adult to cut the egg carton in half.
3. Using any flat hand tool available, fill each section almost to the top with soil.
4. Use your finger to create a hole in the center of the egg cup.
5. Drop one seed in each hole and cover it with soil.
6. Spray with water.
7. Sit it near natural light inside your home.
8. Be sure to water your garden daily, the soil should stay moist.
9. Watch as your seeds begin to sprout in 7-14 days.
10. Ask an adult to help you move it outside.
11. Have an adult to cut the entire egg shell sections apart and place the entire piece, egg carton and all, in the ground.
12. The egg carton will fall apart on its own, becoming a part of the soil!
13. Your plant will continue to grow!

Additional Resources

Think About It! What did you learn about soil and compost? Why do you think it’s important to take care of our soil? Have you ever planted vegetables before, or visited a garden? Maybe there is one in your neighborhood that you can visit and volunteer! What would be the top three seeds you’d like to grow?

1. Listen to the Chicago Botanic Garden talk about the importance of soil: https://tinyurl.com/vvubt2x
2. Learn how to start your own garden: https://tinyurl.com/sy2yzwc

Share It Out

Share on social media: Take a photo of your egg carton garden, or maybe you can share a video of the entire process! As your seeds begin to sprout in a few days, you can capture that moment as well and tell your story on social media. Tag the Chicago Botanic Garden on social media and show them your gardening skills!

Use the hashtags:
#GardenReadAlong
#ProjectExploration
#StemAtHome

Share via PE’s website: Students who complete STEM@home activities and share what they learned with the PE team via our website will earn points which can be traded in for cash prizes at the Explore Store. Your project number is 107. Learn more at www.projectexploration.org/explore-store

Join PE’s character contest!
Design a STEM character who will lead kids through activities and be featured on our website and in our STEMbooks. Cash prizes will be awarded to the top 3 finalists. Learn more at www.projectexploration.org/character-contest.

Need help? Call us: 312-772-6634
www.projectexploration.org