



Remember to share all the cool projects your students are doing on social media to build education and support for your school garden!



Image sourced from: <http://hobbylesson.com/plastic-bottle-planter-ideas/>

## Reduce, Reuse, Grow your Own Food!

### Materials

- plastic bottles of all shapes and sizes
- good quality potting soil
- seeds for herbs and small vegetables
- other building materials, as needed
- water source

### Steps

1. Students will explore the collection of bottles and brainstorm ways to use them to grow food.
2. Students will research efficient ways to grow food in small spaces.
3. Students will design and build a vertical planter using recycled bottles.
4. Raise the challenge and add a requirement that the planter must also assist in saving water.
5. After construction, students will start seeds or plant starts to determine the effectiveness of their design.

**\*\*\*Install these collections in the school garden, courtyard, or commons area to promote education and awareness. Let the students create a poster explaining their project and share them at PTO meetings or open houses.\*\*\***

## Plant Stamps for Fun and Profit!



### Ingredients

- large roll of butcher paper or brown kraft paper
- variety of vegetables and fruits
- several colors of acrylic paints
- paper plates
- knives
- cutting boards

### Steps

1. Roll out large sheets of butcher or craft paper.
2. Use the knives and cutting boards to cut fruits and vegetables in half.
3. Pour paint on to paper plates.
4. Use the fruits and vegetables as stamps to create designs and patterns.
5. Allow the paint to dry.

For fun: Use the large sheets of paper as gift wrap for presents or add to a bulletin board for a unique background or use as a photo booth backdrop. For profit: You can also cut them into smaller works of art to add to greeting cards, picture frames, or posters to sell as a fundraiser for your school garden or club.

## Creating a Trellis that Works!

### Materials

- 1 large roll of twine or cording
- limbs, sticks, or thin boards
- prepped garden bed
- plant starts that climb, such as cucumbers, gourds, luffas, or peas
- weights or items that can hung on trellis



### Steps

1. Students will research lashing, trellising, and macramé.
2. Using supplies provided, students will create a trellis system to support weight and be beautiful.
3. Students will test their trellis by adding weights or items to determine strength.

Teachers can give recognition for aesthetics, strength, creativity, and durability.

Image sourced from: <http://www.njagsociety.org/stem-design-challenges-for-the-garden.html>

# Figuring Germination Rates for Predicting Success



## Steps

1. Soak seeds overnight in warm water then drain them.
2. Soak the paper towel in water and place the seeds in it. Place the combination on the glass plates.
3. Place the seeds in a bright place and monitor them daily. Spritz the paper towel if it starts to dry out.
4. Document how many days it takes each seed to sprout and figure out what the percentage of germination for each variety.
5. Explain how a farmer could use this data.

## Materials

- Seeds from a few different varieties of okra
- Glass plates
- Wet paper towel

Use this resource for figuring out the germination rate: [bit.ly/GerminationRates](https://bit.ly/GerminationRates)

## Meet a Georgia Farmer



**Brooke**

Maple Park Homestead |  
Winder, GA

### Why do you love farming?

*We love farming because we know how and where our food grows. We get to teach our children and community where food comes from and our responsibility in how land is treated.*

### What is your favorite thing to grow?

*Our favorite vegetable to grow is beets. We always grow at least three different colors and eat on the greens and roots most of the winter. It's a two-for-one crop.*

## Okra Facts

The goo that comes out of its pods is called "mucilage."

Okra is a member of the Mallow family, which also includes hibiscus and cotton.

Okra is often used as a thickening agent in gumbos and stews.

Okra is high in vitamin C and has been proven to boost your immune system.

Okra seeds can be roasted, ground, and brewed to produce a coffee substitute.

## Probiotic Okra Pickles



Image sourced from: <https://nourishedkitchen.com/fermented-okra/>

## Ingredients

- okra
- natural salt, such as Himalayan pink salt
- fresh non-chlorinated water
- quart jars with lids, sterilized
- other veggies to ferment, like garlic, green beans, carrots, onions
- scale

## Steps

1. Wash and prep vegetables for fermentation by running them under cool water and cutting off the stems of the okra.
2. Boil jars completely submerged in water for 15 minutes or run through the sanitizing setting of the dishwasher.
3. Place jar on the scale and tare jar.
4. Pack jars with okra and other vegetables to the shoulder of the jar.
5. Cover veggies with fresh water but leave one inch of head space.
6. Weigh jar again. Use the total weight to determine how much salt to add. (For good fermentation, students should figure out 2.5% of the total volume.)
7. Add that much salt to the jar and loosely place lid on top. All veggies should be submerged. Let sit in a cool dark place for 3-7 days depending on how sour the students want them.)
8. Enjoy your okra pickles!

**This video is awesome for explaining how the science works and how to do the math:**  
[bit.ly/OkraPickles](https://bit.ly/OkraPickles)

## Parents:

Want access to okra-themed recipes, activities, and lessons?



Scan the code to sign up for Livin' La Vida Okra resources.

**Did you learn something new about either growing food or making pickles? Circle one.**

**1. Growing food 2. Making pickles 3. Both 4. Neither**