

**Time:**  
40 minutes

**Learn More:**  
This activity has been adapted from the National Agriculture in the Classroom Curriculum Matrix's lesson *Cultures, Food, and Communities Around the World*.

View the full lesson, explore related lesson plans, view vocabulary, videos, and additional book titles by using the QR code or visiting [agclassroom.org/ny](http://agclassroom.org/ny).



**Tips for Reading:**  
*Paati*  
Pronounced pah-tee  
Paati is grandmother.

*Amma*  
Amma is mother.

*Green market* is the farmer's market.

Agricultural Literacy Week 2023 celebrates the connection of food and culture and how it ties generations together. Food is the center of celebrations in families and cultures, and though our backgrounds may be different, many of the same ingredients can be found as the base of the dishes we love. Explore with Neela how tomatoes are grown and the ways they are used in cooking her favorite foods from recipes passed down by her grandmother in India.

- Introduce yourself and your connection to agriculture. Read the book *Tomatoes for Neela*. (15 minutes)
- After reading the book, transition into the below activity.

## Materials

- 2 paper cups per student
- 1 bag of soil
- 1 bag of tomato seeds
- 1 bag of basil seeds
- Spray bottle with water (not included in the kit; for watering the seeds after planting)

## Activity Procedures

### *Interest Approach (5 minutes)*

1. Ask students if their families have special foods or meals they make for holidays or celebrations. Allow the students to share what they eat for those meals and note if there are commonalities amongst the class.
2. Choose one or two of the dishes the students shared and ask them what ingredients are in the recipe (or share a favorite food of your family).
  - Example: If a common food is lasagna, you can talk about the tomatoes, pasta, cheese, and herbs that make up the dish.
3. Ask "what are the common ingredients in our family meals that Neela uses when cooking with her Amma?".
  - Connect with the students that just like Neela discovers the many uses for tomatoes, the foods we share with our families are rooted in many of the same base ingredients – like tomatoes and herbs.

### *Planting Activity (15 minutes)*

1. Ask students where the ingredients for their favorite meals come from. After discussing that food is grown or raised on farms, share that they are going to plant two different seeds to investigate how a few of our common ingredients grow.
2. Give each student two paper cups. Ask them to put their name or initials on both cups, then label one "Tomatoes" and the other "Basil".
  - For younger students you may wish to pre-label or color code the cups with a red circle and a green circle.
3. Move around the classroom with the bag of soil and fill each student's cups 3/4 of the way with soil. Share that soil is part of the environment that a seed needs to germinate or begin to grow.
4. Give each student two tomato seeds and two basil seeds. Ask them to observe the seeds, then compare what is similar and describe what is different about the seeds. Instruct them to place the tomato seeds on top of the soil in the tomato cup, and the same with the basil seeds in the basil cup.



# Lesson & Extension Activities

## Activity Procedures, continued:

5. Ask the students to lightly cover the seeds with soil, and then gently moisten the top of each cup using your spray bottle. While spraying the seeds, share that water is another essential component for seeds to germinate and begin growing.
6. After planting, communicate with the students that they are now responsible for observing their seed growth over the next few weeks. Explain that the last essential piece of the environment a seed needs to grow is warmth, and they should put their cups somewhere warm in the classroom.
  - Students should track data such as when they see their first sprouts, if all the seeds sprouted, they can draw what their plant looks like, and compare the two different seedlings.
7. Explain that as the plants grow, they may need a larger container, or as the weather warms, they can transplant their tomatoes and basil outdoors.

## Conclusion (3 minutes)

Ask the students:

- What types of recipes can you make with tomatoes and basil?
- Will you try the tomatoes and basil you grow?
- What do our seeds need in their environment to grow? (*soil, water, warmth, and air*)

## Extensions for Learning

- Using the information found on the seed packets provided, have the students estimate what date they may see their first sprout, and what day they may be able to eat their crop.
- Journal the changes in the plants over time by recording height, changes in the plant, leaf shape and size, and have them draw conclusions about why some seeds sprouted and why others did not.
- Have students bring in family recipes and build a class cookbook, creating their own collection of recipes like Neela had passed down through her family.
- Use the lesson *The Columbian Exchange of Old and New World Foods* to allow the students to map where the ingredients of their favorite meals and foods originated and how they came to the United States.
- Ask students to interview an elder member of their family or a trusted adult at school about their special memories around food. Have the students write and share that story.

## Seed Packets


Read and understand the information provided on a seed packet to learn more about the variety and make decisions on planting dates, spacing, depth, and more.

Ask your students to consider the growing season in New York and determine the best timelines for harvesting their crop based on the seeds provided.


What other information can they learn about seeds from a seed packet? Do all seed packets have the same information?

**TOMATO,  
ROMA VF**

Compact plants produce paste-type tomatoes resistant to Verticillium and Fusarium wilts. Meaty interiors and few seeds.




Days to Maturity: 76  
Fruit Bearing: Determinate  
Fruit Weight: 2oz  
Mature Spread: 18 in  
Mature Height: 30-36 in  
Fertilize when first fruits form to increase yield.  
Water deeply once a week during very dry weather.



**BASIL PROSPERA  
PREMIUM FI  
ORGANIC**

A beautiful plant with bolt resistance, it provides long lasting production of aromatic Genovese basil. High resistance to Downy Mildew. Intermediate resistance to Fusarium.



Soil temperature: 75 - 80° F  
Seeding depth: 0.12 - 0.12 inches  
Germination days: 10 - 14 days  
Weeks indoor: 6 - 8 weeks  
Maturation days: 70 days

