



Science



Literacy

TOPS AND BOTTOMS

Grade Level

2-5

Length of Lesson

45 minutes

Objective

To help students have a better understanding of how garden vegetables grow and what part of the vegetable they can eat.

Materials Needed

- Copies of the vegetable template
- Hole punches
- White paper plates (2 per student)
- Scissors
- 2 Paper fasteners (brads)
- Glue
- Colored pencils or crayons

Standards

Common Core

CCSS.ELA-

Literacy.RL.K.9;

RL.K.10; RI.K.9;

RI.K.10; RF.K.1; W.K.2;

W.K.8; SL.K.2; SL.K.4;

SL.K.5

NGSS

K-LS1-1; K-ESS3-1

Lesson Summary

This lesson is a fun, hands-on activity that uses paper plates and deepens student understanding of how different vegetables grow. Students will also learn that we eat different parts of different vegetables!

Suggested Sequence of Events:

1. Read through the Illinois AITC Specialty Crops Ag Mag. Interactive online versions can be found on our website.
2. Complete the activity following the procedures:
 - Read "[Tops and Bottoms](#)" by Janet Stevens.
 - Ask students to think of vegetables they eat. Together, list them on a chart. Emphasize that vegetables are plants grown for food. It may also be necessary to emphasize the difference between fruits and vegetables as the list is made.
 - Have students color and cut out the vegetables from the vegetable template.
 - Next, have students fold one plate in half and draw a line down the center of the plate. Color one half of the plate blue and the other half brown.
 - Now have students glue the vegetables on the colored plate. The blue space will serve as the sky, so anything that grows on "top" should be placed on the line "growing" into the blue, anything that grows from the "bottom" should be placed on the line "growing" into the brown side of the plate.
 - On the second paper plate, write the words "Tops" and "Bottoms" in their corresponding place on the plate. Now fold the plate in half and cut along the fold.
 - On the left side of the first plate (the one containing the vegetables) place a hole punch about 1/2 inch from the edge.
 - Lastly, place the two halves labeled "Tops" and "Bottoms" on top of each other and place a hole 1/2 inch in on the left side. This hole should line up with the decorated plate. Line all the holes up and place a brad to secure the plates.
 - Now the bottom plate should have a cover. When the "Tops" is pulled up it should reveal the crops that grow on top and the same with the "Bottoms."
5. Whole class discussion and reflection of activity. Pair students together and have them share their tops and bottoms with their partner.

TEACHER RESOURCES

Extension Ideas:

- After reading *Tops and Bottoms*, have students compare their list of vegetables to the ones featured in the book. See how many vegetables students have already tried.
- Some vegetables have multiple plant parts that are edible. Research less common uses for some of these plant parts and share with your students. For instance, many people throw away or compost their green carrot tops, but those can be used to make a tasty pesto!
- In addition to the parts of the plant, have students also think about the colors of the vegetables we eat and why it's important from a nutritional perspective to have many colors of fruits and vegetables on our plates.
- Write a letter to the Bear and Hare families. Perhaps students could give them hints on growing vegetables or inquire about how their garden is growing.
- Have students start pollinator seeds in your classroom that they can take home to plant at home.
- Start a school garden with quick-growing crops that students can plant and harvest before the school year ends.
- Go to agintheclassroom.org to contact your County Ag Literacy Coordinator for free classroom sets of our Ag Mags!





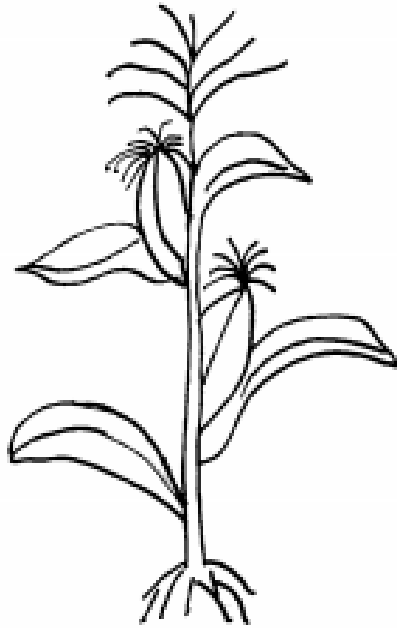
Science



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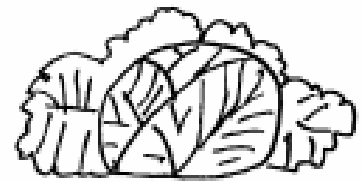
TOPS AND BOTTOMS: TEMPLATE

Tops and Bottoms

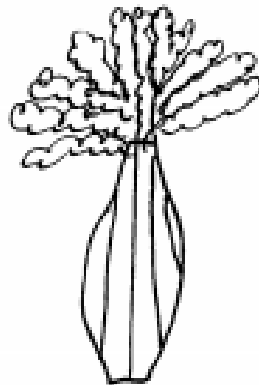


Corn

Beet



Lettuce

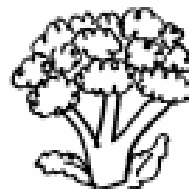


Celery

Carrot



Radish



Broccoli



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Step 1



Step 2



Step 3