

Early Childhood and Lower Elementary:
Plant Tops and Bottoms

Connections to Standards:

English Language Arts K.RL.9; 1.RI.1, 3, 7;
2.RL.1, 6, 7

Upper Elementary: Measuring My Turnip

Connections to Standards:

Science 3-LS3-1; 4-LS1-1

Math 3.MD.4; 4.MD.1; 5.MD.1

Lesson:

Turnips are a plant that is most known for its edible root, but the leaves are a tasty edible as well. Show students the book *Tops and Bottoms* by Janet Stevens, which is a story about a rabbit and bear who decide to grow some plants to eat. Before beginning the book, brainstorm with students about what vegetables might be considered "tops" (stems, leaves, flowers) and "bottoms" (roots) and write this list on the board or a chart. Read the book and then determine if there are other vegetables from the story that should be added to your tops and bottoms chart. Extend this activity by having examples of vegetables in class that can then be discussed and grouped in appropriate category. This activity is adapted from the National Agriculture in the Classroom activity below.

Resources:

National Agriculture in the Classroom - Tops and Bottoms - Activity 2

<http://www.agclassroom.org/teacher/matrix/lesson-plan.cfm?lpid=78&grade=0,1,2&content=HEALTH>

Lesson:

Turnips can come in different shapes and sizes though they're most frequently white and round in shape. Gather a variety of turnips and place them at different table stations. Have students practice their geometry terminology and knowledge by measuring the length, width, diameter, circumference and radius of the turnips. Encourage the use of comparative language supported by measurements to describe the different turnips. Have students practice measurement conversions by measuring in two different units or measuring in one unit and converting to another.

Materials:

Fresh turnips (a variety of different kinds if possible)
Measuring tools: rulers and string
Knife (for cutting some turnips in half)
Pencil and paper for students to record their measurements

Resources:

Oregon Harvest for Schools Turnip Poster



Middle School: What the World Eats

Connections to Standards:

Science MS-LS1-7

Social Science 6.8; 7.20, 21; 8.13

English Language Arts 6.RI.7; 6.W.7; 6.SL.1;
6.WHST.7; 7.SL.1; 7.WHST.7; 8.SL.1; 8.WHST.7

Lesson:

Use the book *Hungry Planet: What the World Eats* by Peter Menzel and Faith D'Aluisio to begin a class discussion about how different cultures, traditions, environments, access to resources, health and safety concerns, etc. influence how family meals compare around the globe. Note differences and similarities students see among the pictures as you're going through the book. Have students individually or in small groups, choose a family/country in the book to be the focus of their research. Many of the foods in their chosen picture may be unfamiliar, so have students research 5 - 10 of these unfamiliar fresh foods and determine the basic nutritional content (calories, fat, protein, carbohydrates, sugar, common vitamins) for each. The USDA's Food-A-Pedia Supertracker tool is a simple tool for finding nutritional data. Extend this activity by having students research and write about what factors (social, economic, physical, political, etc.) might be influencing the food choices of their focus family.

Resources:

USDA Food-A-Pedia Supertracker

<https://www.supertracker.usda.gov/foodapedia.aspx>

High School: Please Don't "Turnip" Your Nose at Me

Connections to Standards:

Health HE.12.PH01.SM

English 9-10.SL.5

Lesson:

Turnips are generally not considered a "common" food among American palates, though their greens can be found sauteed in Southern cuisine. Turnips, however, have much to offer in the way of nutrients, meal diversity and storage potential, but have not gained as much acknowledgement as its cousin, kale. To bring recognition to the turnip, and other lesser-known foods, have students develop an ad campaign for the turnip or other uncommon vegetables. Displays, informational posters, video commercials, and brochures are just a few of the ways students can reach out to fellow classmates and the school to educate them about the benefits of these uncommon vegetables.

Resources:

Weird Vegetables You've Probably Never Heard Of (with photos)

http://www.huffingtonpost.com/2013/05/04/weird-vegetables_n_3210027.html

Oregon Harvest for Schools Turnip Poster

