OREGON HARVEST for SCHOOLS

CLASSROOM CONNECTIONS

Early Childhood and Lower Elementary: Mystery Veggie

Connections to Standards:

English Language Arts K.W.2; K.SL.1, 5; 1.W.2; 1.SL.1, 5; 2.SL.1

Lesson:

For this lesson, students will rely on their sense of touch to make and record observations about a mystery vegetable. To begin have students think about how much we depend on sight to recognize things then introduce the "mystery veggie." Have a radish, with greens attached, either under a heavy blanket, in a box or in some other container that allows students to reach in, one at a time, and feel the radish without seeing it. Depending on the age group, either have the students describe what they felt as a class or individually write down words to describe their initial impressions or draw what they felt. Be sure to emphasize that the point isn't yet to guess what the veggie is, but to use our sense of feel to learn about that veggie. Is it smooth, rough, spikey, soft? What shapes were felt? About what size was it? Were there different parts? How did those parts compare?

Once students have either worked as a class or individually to describe their sense of the veggie, have students draw their impression of the veggie and label it with any descriptions needed. Students may need an additional opportunity to feel the veggie at this time. Once students have completed the task, provide students the opportunity to guess what the veggie might be and then show them the mystery veggie. Comparisons between what the students wrote and/or drew can then be done to see how well our sense of touch can help us "see" the world.

Resources:

Oregon Harvest for School Radish Poster

Upper Elementary: Sprouting Seeds

Connections to Standards:

Science 3-LS1-1; 3-LS3-2; 4-LS1-1; 5-LS1-1

Lesson:

Adapt this lesson from the Electronic Journal for Science Education to introduce students to germination, plant needs and how to set up a scientific experiment. Radish seed germination will be the focus as students choose a problem to investigate, design and conduct an experiment then make observations and a conclusion.

Materials:

Raphanus sativus germination and inquiry
http://ejse.southwestern.edu/article/viewFile/7617/5384

Middle School: Rocks to Radishes

Connections to Standards:

Science MS-LS1-5; MS-ESS3-3; MS-LS2-4; MS-ESS3-1

Lesson:

This lesson was adapted by a Food Corps Service Member to encourage students to ponder how rocks and radishes are connected. Focus is on the food system and how different pieces of that system are needed to go from rocks that create soil to radishes growing in that soil to radishes on our plates. This lesson provides students with the information in a very visual format.

Resources:

Rocks to Radish: Understanding the Food System
http://www.mlui.org/userfiles/filemanager/1714/

High School: Dose-Response Radishes

Connections to Standards:

Science HS-LS2-1; HS-LS4-6

Lesson:

This high school activity from The Science Behind Our Food program of the University of Georgia can be used to introduce students to the idea of toxicology and how different chemicals can influence living beings. Students will use the germination of radish seeds in a hands-on way as they experiment with different doses of toxins and observe the response of the radish seed germination.

Resources:

Introduction to Toxicology Lesson Plan
http://extension.uga.edu/k12/science-behind-our-food/lesson-plans/IntrotoToxicology.pdf