Early Childhood and Lower Elementary: Enchanted Broccoli Forest
Connections to Standards: English Language Arts K.W.3; K.SL.5; 1.W.3, 5; 1.SL.5, 6; 2.W.5
Math K.MD.2

Materials:
- Enchanted Broccoli Forest recipe (from Mollie Katzen’s cookbook, may be found at your local library or search online) and ingredients

Make the Enchanted Broccoli Forest recipe from Mollie Katzen’s cookbook by the same name (essentially a casserole made of rice, cheese, herbs, onion, and broccoli trees) with students. While you put it all together, wait for it to bake, then sample it together, discuss story ideas for the forest. What makes it enchanted? Who lives there? What do they like to do? You may also use this as an opportunity to write about the event of making the forest, putting the steps in chronological order, and having students respond to the experience in writing and illustrations. Use this cooking experience as a prompt for learning measuring and other cooking skills, about the benefits of eating broccoli, and writing and illustrating.

Resources:
The New Enchanted Broccoli Forest Cookbook by Mollie Katzen
www.indiebound.org/book/9781580081269

Honest Pretzels, Salad People, and Pretend Soup
Children’s Cookbooks and online recipes
www.molliekatzen.com/kids.php

Upper Elementary: Broccoli Beats
Connections to Standards: Health Education HE.03.HE.03; HE.05.HE.01

Materials:
- samples of broccoli for students to try
- samples of familiar songs that could be adapted to be about broccoli
- books and other research resources for students to learn more about broccoli

Play “I Feel Good” by James Brown and ask students to describe how James Brown could have adapted his classic soul song to be about broccoli (or another favorite Oregon-grown fruit and vegetable). Share facts from the Oregon Harvest for Schools poster and Family Newsletter with students to get students thinking about the many benefits eating broccoli can have for our bodies. Working in collaborative groups, invite students to create their own “broccoli beats”—songs that teach listeners about the benefits of eating this and other dark-green leafy vegetables. Work with school food service to use the songs to promote Oregon Harvest for Schools in the cafeteria or with younger grades.

Adapted from:
Broccoli, for Elementary-Level General Music Classes SuperKids Nutrition
www.dole.com/~media/Superkids/Lesson%20Plans/Music/Broccoli_plan.ashx
Middle School: Farmers, Food, and Artificial Selection

Connections to Standards:
Science 8.1L.1; 8.2L.1

Materials:
- samples of broccoli, cabbage, kale, cauliflower, and kohlrabi
- photo of wild mustard

Farmers have been selecting specific plants to grow based on desired traits for as long as humans have been growing their own food. Farmers and breeders have allowed only the plants and animals with specific characteristics to reproduce, leading to the evolution of farm stock we rely on today. This is called artificial selection because people, instead of nature as in natural selection, select which organisms get to reproduce.

Did you know broccoli, cabbage, kale, cauliflower, and kohlrabi are all derived from the same plant? Wild mustard has been artificially selected over time for a variety of traits to lead to each different vegetable we now commonly eat. Examine and taste each of the vegetables that came from wild mustard. What characteristics were farmers selecting for to get each of these different cultivars? Use this exploration as a starting point for further investigation of both artificial and natural selection. See below for more resources and lesson ideas.

Resources:
- Artificial Selection
- Understanding Evolution
www.evolution.berkeley.edu/evolibrary/article/evo_30

Students know organisms can be bred for specific characteristics.
Southern Nevada Regional Professional Development Program
www.rpdp.net/sciencetips_v3/L8A3.htm

Artificially Selecting Dogs
www.ucmp.berkeley.edu/education/lessons/breeding_dogs/

High School: Why does broccoli cost more than a hamburger from the dollar menu?

Connections to Standards:
Social Sciences HS.9, 20, 51, 56, 57, 58, 59, 63
English Language Arts 9-10.RI.1; 9-10.SL.2; 11-12.RI.1, 3, 7; 11-12.SL.2
Health Education HE.HS.HS.03

Utilize the documentary Food, Inc., a film that examines what we eat and the food industry in the United States, and resources from PBS, to investigate how agricultural subsidies influence food choices, health, and the economy. Through film clips, informational text, and discussion, students explore factors that influence their family's food choices and why broccoli costs more than a hamburger from the dollar menu.

Lesson: U.S. Agricultural Subsidies and Nutrition
www.pbs.org/pov/foodinc/lessonplan2.php#.Ubes-cWTFTNR

Resources:
- Food, Inc. Discussion Guide, Center for Ecoliteracy
www.ecoliteracy.org/downloads/food-inc-discussion-guide