

Early Childhood and Lower Elementary:
Leaf Prints

Connections to Standards:

Math K.MD.1, 2; 2.MD.1, 4; 2.MD.9

Lesson:

This lesson combines art and math to create colorful ways to explore length and width. A visual example of what students will be doing and a review of length and width should start this lesson. Have students fold a piece of paper in half (hotdog style). Students then label measurements of length and width along the paper with the length being the fold of the paper (y-axis) and the width being the bottom of the paper. A spinach leaf is then placed into the folded paper, with the leaf's side nestled up to the fold in the paper and the bottom of the leaf right at the bottom of the paper. Instruct students to rub a crayon or pencil gently on the top of the paper covering the leaf. As the leaf is rubbed, the details of the leaf will appear. After the rubbing is made, remove the spinach leaf from the paper. Using the measurement the students created before on their paper, they should now be able to approximate how long and wide their leaf is from the their rubbing as well as seeing the main stem, veins and shape of the leaf.

Resources:

Oregon Harvest for Schools Spinach Poster

Leaf Rubbing Overview

<http://herbarium.desu.edu/pfk/page29/page30/page31/page31.html>

Upper Elementary: Luscious Leaves

Connections to Standards:

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

Lesson:

Adapt this lesson from the National Agriculture in the Classroom Foundation to help students understand the diversity of edible leaves and how they are important for a healthy diet. Students will focus on spinach, kale, lettuce, parsley and Swiss chard as they explore the leaves by tasting, smelling, observing and measuring. Focusing on the nutritional importance of edible leaves, students then fill out a bar graph of vitamin A levels of each edible leaf.

Resources:

National Agriculture in the Classroom - Luscious Leaves

http://www.agclassroom.org/teacher/matrix/lessonplan.cfm?!pid=47&content=HEALTH&lesson_states=38



Middle School: Recipe Rendezvous

Connections to Standards:

Art AR.08.HC.03, 04

English Language Arts 6.SL.1; 7.SL.1; 8.SL.1

Lesson:

Incorporating new foods into students' palates can be a daunting task, but providing a creative way for students to introduce themselves to these vegetables can create a greater likelihood of acceptance. To begin, introduce students to the hardy greens and introduce their goal for the day; to work collectively to create the best tasting salad and dressing. Allow time for exploration and tasting of these greens, then have students work in groups to mix together their own salad mix, measuring out each ingredient into their own bowls and recording each step of the recipe they are creating. Remind students to work together as a group, encouraging all opinions and thoughts about tastes, textures, ratios of greens, etc. to be expressed and considered. Encourage students to think about creating a recipe as a form of art. It represents the material present at the time and the unique individuals using those materials so every group's salad will be different. After their salad is created, have groups create a recipe for a salad dressing and record that recipe. Discuss the process with the students, did they use all ingredients, what factors influenced their decision to use or not use an ingredient, etc.? Students then sample their own creations.

Materials:

Large bowls of cleaned and chopped: spinach, kale, chard, lettuce

Salad dressing ingredients: olive oil, salt, pepper, vinegar, apple juice, lemon juice, etc.

Measuring spoons

Small jars with lid to mix dressing ingredients - 1/ student group

Small bowl - 1/student group

Salad tongs or utensils

Bowls and utensils for students to eat salad

High School: Nutrient Labels for All

Connections to Standards:

Science HE.12.PH01.CC; HE.12.PH01.SM

English Language Arts 9-10.SL.5

Lesson:

Have you ever noticed that fresh produce does not have a nutritional label on it while all packaged food is required to have one? Just because it doesn't have a nutrition label, doesn't mean a fresh vegetable is lacking nutrients, in fact, it's just the opposite. Bring attention to the health benefits of eating fresh fruits and vegetables by having students create nutritional labels for spinach and other nutrient dense, fresh foods. Students can find various nutrient information using a resource such as the USDA's Food-A-Pedia Supertracker tool and can get an understanding of what information to include on their label by looking at examples of real nutrition labels.

Resources:

USDA Food-A-Pedia Supertracker

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

