



Lettuce, a leafy vegetable we use for salad, in sandwiches, and other dishes, is known to scientists by its scientific name, *Lactuca Sativa*. There are four common types of lettuce: leaf (also called loose-leaf), romaine, crisphead, and butterhead. The nutritional value of lettuce varies with the variety. Its most significant nutrients are vitamin A and potassium. The vitamin A comes from beta carotene, whose yellow-orange is hidden by green **chlorophyll** pigments. The darker green, the more beta carotene present. **Write a paragraph highlighting the nutritional value and health benefits of different lettuce varieties using online or printed resources.** Standards: CC ELA: W.3.2, W.3-

Get Growin'

Plant the seeds from different lettuce varieties to grow a salad bowl garden on students' desktops. Under ideal conditions, lettuce seeds will germinate in eight to 10 days. After seeds germinate, remove seedling to plant in a container or in the ground. Measure and graph the growth rate of each seed. Use QR code for detailed instructions. Standards: NGSS: 3-LS1-1, 4-LS1-1, 5-LS1-1 CC: Math: 3-4, MD: 4, 6.SP.4, 7.RP.2, 7.G.1



Lettuce Experiment

Create a Rainbow Phloem & Xylem Lab

Xylem and phloem are two tissues found in plants which transport substances that plants need to live. Xylem cells are responsible for transporting water and dissolved nutrients from the roots up the stem to the leaves. Phloem cells are responsible for transporting a sugary sap that is made in the leaves during **photosynthesis** to the rest of the plant. Conduct a class experiment to see how the xylem and phloem function in different varieties of lettuce. Start by collecting one variety of lettuce. Place one leaf in each cup of water colored with food dye. Carry out two investigations, change out the variety of lettuce (the variable) each time. Compare observations from the first and second investigations and discuss with the class the differences you found.

Standards: NGSS: MS-LS1-1, MS-LS-6

Lettuce Variety: _____	Lettuce Variety: _____
Observation	Observation
Day 1:	Day 1:
Day 3:	Day 3:
Day 5:	Day 5:

Lettuce Rap!

"Lettuce is nutritious, lettuce is cool, if you don't like lettuce, you're really a fool." Have a class challenge of writing your own Specialty Crop Rap and perform it for the class!

Did you Know?
Americans eat 25.8 pounds per person of lettuce each year.

Tech Check



Check out the link to see NASA Crew Members sample leafy greens on the space station and their experiments!

Make your own Lettuce Wraps



Think beyond the salad bowl—lettuce can be used for a number of dishes, including lettuce wraps. Lettuce wraps are similar to tacos, but with lettuce instead of a tortilla. Make lettuce wraps at home or school using one of the featured lettuce varieties and at least three additional crops within this edition of *What's Growin' On?* Here are some combinations to get your wrap started:

- Carrot, mushroom, onion, and edible flowers.
 - Pumpkin, walnuts, and orange
- My wrap: _____