

GARDEN-BASED HEALTH & WELLNESS CURRICULUM

FOR 3RD - 5TH GRADE



SPROUTIS GROW WITH S

Lesson #2

vegetables & gardening, plant parts, plant cycle

CONTENTS

Materials	1
Content Standards	2
Lesson	2
Recipe	4
Plant Part Booklet	4
Plant Cycle Poster	8
Plant Parts Poster	9



MATERIALS

- Paper/pencils
- 6-page booklet for independent activity (1 copy per student of provided master, or 3 sheets of paper folded in half)
- Markers/crayons/colored pencils
- Magazines or grocery ads, if desired

- Teacher materials:
 - » Plant cycle mini poster
 - » Plant part mini poster
 - » 2 of each vegetable from different plant parts
 - » 10 paper bags (2 sets, # 1-5)

*optional: From Seed to Plant by Gail Gibbons

CONTENT STANDARDS

SCIENCE

- 5.1.1.d Make relevant observations and measurements
 5.3.1.b Identify how parts of plants and animals function to meet basic needs (e.g., leg of an insect helps an insect move, root of a plant helps the plant obtain water)
- 5.3.2.b Identify the life cycle of an organism
- 4.4.1.a Locate, organize, analyze, and evaluate information from print and digital resources to generate and answer questions and create new understandings



ELA

- 4.1.6.0 Demonstrate an understanding of text via multiple mediums (e.g., writing, artistic representation, video, other media).
- 4.4.1.a Locate, organize, analyze, and evaluate information from print and digital resources to generate and answer questions and create new understandings.

LESSON

Objective

• The student will identify parts of a plant that are edible (vegetables) and describe the sequence of the plant life cycle in order

A+

- How do plants get the energy they need to grow? (water/light/soil/space)
- What nutrient do people and plants have in common? (water)

Vocabulary

- <u>Vegetable</u> part of a plant that you can eat
- Seed product of a plant that can be used to grow a new plant
- Root the part of the plant that grows underground and gets water from the ground. It also anchors the plant to the ground.
- <u>Stem</u> the main part of the plant that supports the leaves and flower the part of the plant from which seeds or fruits develop
- <u>Leaf</u> flat, green part of the plant that grows from the stem

Modeled

<u>Teacher:</u> to grow a plant, we usually put a seed in the soil. This is the start of the plant life cycle. The teacher will lead discussion of the steps of a plant life cycle using provided visual. Roots grow underground and bring nutrients from the soil and water up to the rest of the plant. The shoot or stem then grows up from the soil, the leaves are attached to the stem and collect sunlight. Flowers turn into fruit or seed pod. The seeds can then be planted to start the cycle over again.

*Optional: Gail Gibbons – <u>From Seed to Plant</u> can be used during this portion

*If available, live plants in a garden setting can be used to show plant parts

The teacher will list non-standard ways to measure servings:

- Just as with fruits, 1 serving = 1 cup fresh
- Raw veg = size of baseball or 2 open hands
- Raw veg = size of baseball or 2 open hands
- Cooked veg = 1/2 c = one handful



Mystery Vegetable Bag: Place two each of five different vegetables in paper bags numbered 1-5. Have students sit in small groups and pass the bags around and ask the students to guess or describe the vegetables inside only by touching or smelling them.

The student will share vegetables they like to eat, teacher creates running list.

Guided

The student will work in pairs to categorize vegetables from shared activity by their matching plant part that is commonly eaten: root (such as carrots/potatoes/beets), leaf (lettuce/kale/spinach), stem (celery/asparagus), flower (broccoli/cauliflower florets are flower buds), or seed (such as peas/beans/grains).

*Fruits commonly eaten as vegetables could also be in a category labeled "Fruit" to create connection to previous lesson.

Independent

The student will create plant part book, which lists at least one vegetable from each plant part. Students may illustrate, cut images from magazines/grocery ads, or print images from online. Students must provide at least one nutrient provided by each plant part

Summary

The student will compile plant part snack wrap, and identify which plant part each ingredient comes from.

<u>Discuss in pairs, or small/whole group:</u> What are some new ways you could add fruits or vegetables to your diet?

Home Challenge

- Identify which plant parts you are eating in your food log
- Quiz family members to idenitify plant parts eaten in a meal

PLANT PART SNACK WRAP

Ingredients

Hummus

Lettuce leaves (romain or butter lettuce works best)

Broccoli florets

Shelled, raw peas (sugar or snap are easiest, students could also shell from pods during assembly)

Chopped celery or asparagus

Grated carrots (can be purchased prepared or grated using a cheese grater)

Instructions

Spread a small scoop of hummus on lettuce leaf. Add some of each other ingredient. Roll wrap and enjoy!



PLANT PART BOOKLET

Instructions

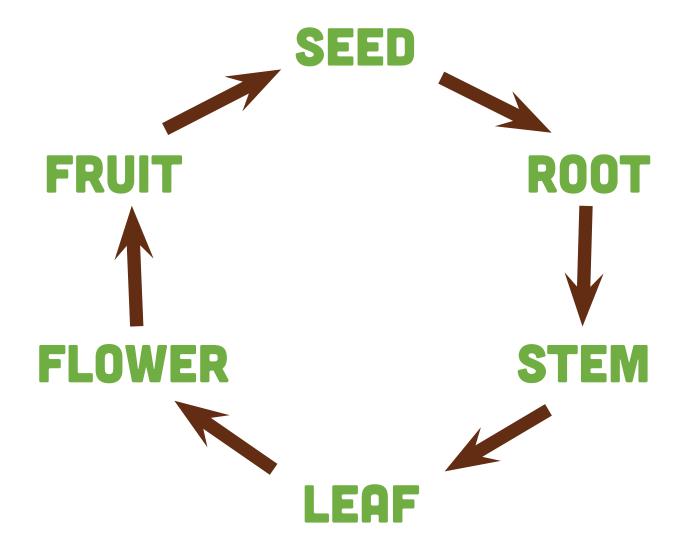
Print the next three pages double sided, leaving the non-printed side as a cover for the students to decorate. Or have students construct their own plant part booklets!



ROOT

STEM

LIFE CYCLE OF A PLANT



PARTS OF A PLANT

SEED



ROOTS



FRUIT



FLOWER



STEM



LEAF



ABOUT THIS RESOURCE

This Garden-Based Health and Wellness curriculum and video series was funded by a grant from the Futuro Latino Fund, a grant program of the Omaha Community Foundation. Curriculum was designed by Octavia Butler, Gomez Heritage Elementary School. Accompanying videos created by Torchwerks. Graphics courtesy of freepik.com. Special thanks to Albert Varas, City Sprouts Board President, for his leadership on this project. For additional information, contact City Sprouts at info@omahasprouts.org.

This curriculum and accompanying videos are available at omahasprouts.org/learn.

© City Sprouts 2017

City Sprouts
PO Box 31593
Omaha, NE 68131
(402) 504-1910
www.omahasprouts.org

City Sprouts is a 501(c)3 nonprofit organization.

Our mission is to sustain communities through gardening.







