



## POST-TRIP LESSON: PLANT PARTS BINGO

**Overview:** Students play a game to reinforce vocabulary and concepts learned in the Plant Parts, Seed to Harvest, and Pollination modules during the field trip.

**Sauvie Island Center Field Trip Connections:** Plant Parts, Seed to Harvest, Pollination

### Objectives:

Students will be able to:

- Describe the functions of various parts of plants, seeds, and flowers, and identify how each is important to the plant's survival or reproduction
- Describe the composition of their soil sample
- Identify one fruit or vegetable that comes from each plant part

### NGSS Essential Question

- *How do the structures of organisms enable life's functions?*

**Grade:** 1-5

**Time:** 20-40 minutes (depending on how long you play)

**Location:** Classroom

### Materials:

- Copies of bingo card for each student and teacher
- Copies of word bank for each student and teacher
- Dried beans (or other space markers) - 25 for each student
- Glue sticks or clear tape
- Magnifying glasses
- Scissors

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### Lesson Outline:

#### 1. Preparation:

- ▷ Cut out words from word bank and place in bowl or hat, to draw from during game

#### 2. Make bingo cards:

- ▷ Instruct students to cut out the words from their word bank, mix them up, and then glue or tape each word onto a bingo square. Each student's bingo card should be organized differently.

# POST-TRIP LESSON: PLANT PARTS BINGO CONT.

## Lesson Outline *cont.*:

- ▷ For older students, you can save time and paper by writing the word bank on the board and having them copy the words onto their own cards.

### 3. Play plant parts bingo:

- ▷ Pass out beans or other markers to each student. Pull out a word from the bowl or hat, and have students mark off that word on their cards with beans. Students win by marking five words in a row down, across, or diagonally.
- ▷ As you pull words, discuss and review each one's meaning, and the students' experience with that word on the farm. Have students define the word, discuss the job it does to help the plant survive or reproduce, or discuss what part of the plant that food example is.

↪ *Here are some details for each word:*

**(Each part of the plant plays a vital role in keeping the plant alive or helping it to reproduce)**

- **Roots:** absorb water and nutrients; anchor the plant; and store food.
- **Stems:** transport water and nutrients; hold up the upper plant parts; store food.
- **Leaves:** make food through photosynthesis; inhale CO<sub>2</sub> and exhale oxygen.
- **Flowers:** attract pollinators to the plant's reproductive parts.
- **Fruits:** hold and protect the seed/s; attract animals for seed dispersal.
- **Seeds:** hold the embryo; store food to be used by the baby plant.

↪ *On the Bingo cards, there are two examples of each of the Plant Parts that we eat:*

- **Root:** radish and carrot
- **Stem:** asparagus and celery
- **Leaves:** lettuce and kale
- **Flower:** cauliflower and broccoli
- **Fruit:** tomato and pumpkin
- **Seed:** peas and beans

↪ *Other words to know and discuss on the Plant Parts Bingo cards:*

- **Nectar:** A sugary liquid produced by some flowers in order to attract pollinators.
- **Pollen:** A plant's male reproductive cells produced by a part of the flower called the anther. It is what insects inadvertently carry with them and as a result pollinate other flowers, which usually results in the production of a fruit.
- **Seed Coat:** The protective outer layer of a seed.
- **Pollination:** To move pollen from a flower stamen to a stigma, usually done by wind or an insect/animal visitor (the pollinator could be a fly, bee, bat, hummingbird, moth, butterfly)
- **Plant Embryo:** An immature plant within a seed. It is the developing baby plant.
- **Reproduction:** The act of creating new individuals of the same species.

# POST-TRIP LESSON: PLANT PARTS BINGO CONT.

## Extension Opportunities:

- ▷ Add different words to the word bank to adapt the game for your class' needs. See the Sauvie Island Center field trip vocabulary: <http://www.sauvieislandcenter.org/wp-content/uploads/2017/02/SIC-vocabulary-List-for-Teacher-Resource-Page.pdf>
- ▷ Use the game as a scavenger hunt in the school garden or playground. Have students bring bingo sheets outside, and mark off with a pencil when they find an example of that word.
- ▷ Sing the song “Roots Stems Leaves” by the Banana Slug String Band: <https://bananaslugs.bandcamp.com/track/roots-stems-leaves>
- ▷ Review diagrams used during the field trip: <http://www.sauvieislandcenter.org/educators/trip-resources/>

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## Next Generation Science Standard Connections:

### Disciplinary Core Ideas:

- **Life Science 1.A: Structure and Function** *How do the structures of organisms enable life's functions?*
  - ▷ All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. (1-LS1-1)
  - ▷ Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (4-LS1-1)



## Word Bank - Plant Parts Bingo

### *Banco de Palabras - Bingo de las Partes de la Planta*

Root  
*La raíz*

Kale  
*La col rizada*

Petal  
*El pétalo*

Stem  
*El tallo*

Beans  
*Los frijoles*

Reproduction  
*La reproducción*

Leaf  
*La hoja*

Asparagus  
*los espárragos*

Pollination  
*Polinización*

Flower  
*La flor*

Cauliflower  
*La coliflor*

Nectar  
*El néctar*

Fruit  
*La fruta*

Broccoli  
*El brócoli*

Pollen  
*El polen*

Seed  
*La semilla*

Lettuce  
*La lechuga*

Plant Embryo  
*El embrión*

Tomato  
*El tomate*

Radish  
*El rábano*

Seed Coat  
*Cubierta de la  
semilla*

Pumpkin  
*La calabaza*

Carrot  
*La zanahoria*

Celery  
*El apio*

Corn  
*La maíz*



**Plant Parts Bingo**  
*Bingo de las Partes de la Planta*
