



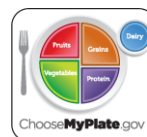
## Lesson 4: Vegetables and Fruits– Parts of a Plant

### TEACHING OUTLINE

| Time/Hints  | If possible, set up food prep table. prior to lesson   |
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| <b>2 Minutes</b>  | Put up the MyPlate poster. Choose several Vegetable Group food models. <ul style="list-style-type: none"> <li>Greet students and review the Fruit Group (name some foods, nutrients that make them “GLOW” foods; fiber from fruit; ask if anyone what healthy beverages choices they made last week?</li> <li>I’m wondering if you know where the different veggies and fruits you eat come from. Did you know that the veggies and fruits you eat are just different parts of plants? I bet many of you like roots and seeds for your snacks, and that many of you had a plate of flowers &amp; roots for dinner last night!</li> </ul>   |
| <b>15 Minutes</b><br><br>Choose:<br><b>Option A</b><br>Use Velcro board and place name by part of plant diagram<br><br>OR<br><b>Option B</b> (at end of lesson)<br><br><b>Vocabulary</b><br>Leaf, flower, root/ tuber, stem, fruit, seed; processed; sodium | <ul style="list-style-type: none"> <li>Let’s look at the parts of a plant and see if we recognize some of our favorite vegetables and fruits.</li> <li>There are six parts to a plant. Would you say these with me? 1)leaves; 2) flowers; 3) seeds; 4) fruits; 5) stems; 6) roots</li> <li>OK, now let’s try to name as many parts of the plant as we can...you’ll really have to think hard. Let’s start with: * <ol style="list-style-type: none"> <li><b>Roots –grow under the ground:</b> carrots, parsnips, potatoes, beets, radish, turnips, jicama, onions, sweet potato...</li> <li><b>Stems:</b> celery, asparagus, rhubarb, broccoli, bok choy...</li> <li><b>Leaves:</b> lettuce, spinach, cabbage, greens, parsley, Brussel sprouts...</li> <li><b>Flowers:</b> broccoli, cauliflower, artichoke...</li> <li><b>Fruits –contain the seeds of the plant:</b> cucumber, tomato, pumpkin, bell peppers, avocado, green beans...</li> <li><b>Seeds:</b> peas, corn, dry beans (black, pinto, lima, kidney, garbanzo, navy...) sunflower seeds, pumpkin seeds, split peas...</li> </ol> </li> </ul> |
| <b>3 Minutes</b><br><br>Choose one PA option at the end of this outline   | <b>Physical Activity Break—</b><br><b>Option A:</b> Rhythmic <i>Go Bananas</i> (See end of lesson)<br>OR<br><b>Option B:</b> Being a Plant Mime <ul style="list-style-type: none"> <li>Let’s look at the parts of a plant and see if we don’t recognize some of our favorite vegetables and fruits. There are six parts to a plant. Would you say and copy my movements with me? As you point to each part of a plant, act out the action. <ol style="list-style-type: none"> <li>leaves-standing with arms out, like teacup spout (<u>lettuce, spinach, cabbage, greens</u>)</li> <li>flowers-arms in circle over the head (<u>cauliflower, broccoli</u>)</li> <li>seeds-neck/shoulders scrunched with thumbs and forefingers measuring tiny seed (<u>corn, peas, beans</u>)</li> <li>fruits-hands forming circle in front of body (tomato, peppers, squash)</li> <li>stems- stand straight up with arms straight up (<u>celery, asparagus, broccoli, rhubarb</u>)</li> <li>roots- squat down to the floor (<u>carrots, potatoes, onions, beets, radish, turnips, jicama</u>)</li> </ol> </li> </ul>      |

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|---|--|
| <p><b>15 Minutes</b><br/>Daily Amounts</p> <p>HINT<br/>All parts of the plant contain fiber: roots, stems, leaves, fruits, seeds.</p> | <ul style="list-style-type: none"> <li>• Great job! Let's look at MyPlate. MP gives us a clue to how much "glow" foods do we need to eat every day. <i>What is the message that MyPlate tells us about veggies?</i> (Vary your veggies) That's right!</li> <li>• Third graders need at least 3 cups of veggies every day. (Hold up cup measures. Why do you think you need so much? (We get certain nutrients from them.)...does anyone have a guess? (Vitamins)</li> <li>• Let's see what that looks like. Show how many serving sizes students might eat for each meal by using the MyPlate and paper food model. Place vegetable food models on the fruit and vegetable section of the plate and replace it with another vegetable food as you describe and count number of servings they can eat throughout the day.</li> <li>• <i>Like fruit, vegetables are also "Glow Foods."</i> Ask the students if they remember from last week what are the health benefits of Vitamin A (gives us healthy skin, eyes, hair and bones). Ask students if they can name some vegetables that have lots of Vitamin A (hint: orange colored flesh that is the <u>inside</u> of the fruit, not the peel). <i>Can you think of some?</i> (Carrots, sweet potatoes, winter squash, pumpkin)</li> <li>• Another nutrient veggies give us is vitamin C. Does anyone remember what vitamin C does for our bodies? (Healthy skin, helps wounds heal, helps resist infection). Vitamin C is often found in many veggies. Let's try to find them on the board (broccoli, cabbage, cauliflower, Brussel sprouts, spinach and other green leafy types, bell peppers, tomatoes)</li> <li>• Veggies also contain fiber. Who remembers what fiber does for us? (Sweeps intestines clean). Where do we find fiber? (Bran in grains, peels of fruits, potato peel, leaves, flowers and stems of vegetables, and seeds in cucumber, peas...)</li> <li>• Where do we find vegetables (in garden, farmers market, grocery store)? They come in many forms: some are fresh; others are 'processed'...we find them in a freezer or in a can. <ul style="list-style-type: none"> <li>• Note that when processed, add salt or sodium (compare fresh vs canned green beans sodium content.)</li> <li>• Point out that we get too much salt/sodium in our food. Too much sodium can make us gain weight which makes our hearts work too hard, so its good to eat less salt when we can.</li> <li>• How can we eat less salt with vegetables? (eat fresh, frozen; rinse canned vegetables to wash away most of the salt.</li> </ul> </li> <li>• Let's try to eat at least 3 cups of veggies every day.</li> </ul> |
| <p><b>15 Minutes</b></p> <p>Select student helpers to distribute samples</p>  | <p><b>Food Activity</b></p> <ul style="list-style-type: none"> <li>• We are going to try all six parts of the plant. You might see some veggies that are new to you, but be brave and at least take one little bite of each. If you don't like it, you can quietly spit it into your napkin and throw it into the garbage can.</li> <li>• We will pass out napkins. After you wash your hands, get in line, take a small paper plate, and take one of each different part of the plant.</li> <li>• As students taste their veggies, discuss the part of the plant that each represents.</li> <li>• Discuss the importance of washing their fruits and vegetables.</li> </ul>   |

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|-----------------------------|---|
|                             | <ul style="list-style-type: none"> <li>Tell them to rinse vegetables before preparing or eating them. How to clean: Under clean, running water, rub vegetables briskly with your hands to remove dirt and germs. Dry with a clean cloth towel or paper towel after rinsing.</li> </ul>  |
| <b>7 Minutes</b>            | <p><b>Eat a Rainbow Jeopardy (as time allows)</b></p> <ul style="list-style-type: none"> <li><i>Are you ready to play Jeopardy?</i> We will divide the class into four teams (you may name the teams if you like; fruit or veggie names). Assign a spokesperson from each group. Encourage the students to work as the team.             <ol style="list-style-type: none"> <li>Start with one group and have the spokesperson select a category and a number from the Jeopardy board. (<i>Vitamin C for 20, please!</i>) Allow group to whisper and discuss what they think the answer might be (about 20 seconds), then ask the spokesperson to give the answer.</li> <li>If answer is correct, add the number to the team's pile nearby. If incorrect, the question goes to the next team, who get only one try to answer correctly. A correct answer is a bonus and does not take away a team's turn to select.</li> <li>Move on to group B, C, and D. Start with group A again. The spokesperson remains the same for the duration of the game.</li> <li>Have student count number cards to see which team has the most. (Check with the teacher first, as some prefer not to make this a competitive game.)</li> </ol> </li> <li>Ask the students <i>"Who has learned something from the game?" You are all winners!</i></li> </ul> |
| <b>2 minutes Conclusion</b> | <ul style="list-style-type: none"> <li>Show the newsletter for students to take home to parents. Leave with teacher</li> <li>Suggest that they try the Ragin' Ramen recipe.</li> </ul>  |



## Lesson 4: Vegetables

### Parts of the Plant Activity - Option B

#### Objective

Students recall parts of the plant and identify edible vegetables/fruit for each part.

#### Activity Supplies

- White board; chart paper or newsprint
- Parts of the Plant diagram, blown up to 18 x 30 inches long.
- 6 different colored markers

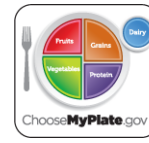
#### Preparation

1. If educators are comfortable with their own drawing, just post a large chart paper up on the white board.
  - a. If educator want some support, enlarge the provided parts of the Plant diagram and lay it under the chart paper. This can be used as a guide for drawing the different parts of the plant.
  - b. Or, educators can pre-trace the outline of the plant before class.

#### The Activity

1. Hang up chart paper with the plant outline or drawing underneath. Use the graphic as a guide for drawing each part of the plant and making it come to life. Use different colored markers for each part of the plant.
2. First draw the roots. Making a clear demarcation of the ground as a horizontal line.
  - a. Prompt the students with facts like, roots grow underground, function etc.
  - b. As you draw the roots, have the students call out veggies that they think are roots.
  - c. Write their ideas down in the space.
3. Repeat this process with stem, leaves, flowers, fruit and seeds, using different colors for each part and the students' vegetable ideas on the drawing.
4. Revisit the drawing, from the roots up, and share what roots do for the plant, and their different shapes. Identify which of the ideas up on the chart are correct. Circle them. Which are not? Why? What plant part are they? (add new ideas to the correct plant part and with the correct color marker. Use the references given the script.
5. At the conclusion, ask the classroom teacher if s/he would like the chart, so her students can continue to work on it. They could add new veggies they may find in the school cafeteria or brown bag lunches, or from their home.

This activity could provide photo documentation.



## Lesson 4: Vegetables and Parts of a plant Physical Activity Option A: *Go Bananas\**

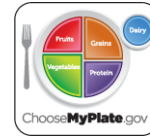
Have students stand at their desks or form a circle. Set a beat by snapping fingers or clapping hands and bopping to the beat. Use rhythm when making the following motions:

- When ‘forming’ a fruit or vegetable, swing right arm out and up to over your head according to the beat. Then do the same for the left, with fingers meeting at the top.
- As you ‘peel’ the veggie or fruit, bring right arm out and down toward your side, followed by the left, using a different motion for each V/F (re: peeling potato: use motion as if you are holding a veggie peeler; peeling orange: with pinched fingers, rotate hand in circles at the wrist while bringing arm out and down to side; shucking corn: with hands horizontal to the floor, use slicing motion while bringing arm to your side; peeling banana: use downward sweeping motions, as if actually peeling a banana).
- During the last two lines of each verse, use motions to pantomime each action: (re: mash potatoes: with fists clench in front of you, do up and down motion in rhythm with feet; squeeze orange: wrap your arms around your midsection and squeeze yourself with all your might while twisting side to side; pop the corn: while bouncing, throw up your hands and splay fingers wide several times; go bananas: with arms over head, shake hands wildly while turning a circle.

Lyrics that move to Rhythm

|  |  |
|--|--|
| Form potato, form-form potato (right arm)<br>Form potato, form, form potato (left arm)<br>Peel potato, peel-peel potato<br>Peel potato, peel-peel potato<br><b>Makes you Mash Potato, Mash-Mash Potato</b><br><b>Makes you Mash Potato, Mash-Mash Potato</b>   | Form the corn, form, form the corn<br>Form the corn, form, form the corn<br>Shuck the corn, shuck-shuck the corn<br>Shuck the corn, shuck-shuck the corn<br><b>Makes you Pop the Corn, Pop-Pop the Corn</b><br><b>Makes you Pop the Corn, Pop-Pop the Corn</b> |
| Form the orange, form, form the orange<br>Form the orange, form, form the orange<br>Peel the orange, peel-peel the orange<br>Peel the orange, peel-peel the orange<br><b>Makes you Squeeze the Orange,</b><br><b>Squeeze-Squeeze the Orange</b><br><b>Makes you Squeeze the Orange,</b><br><b>Squeeze-Squeeze the Orange</b> | Form banana, form, form banana<br>Form banana, form, form banana<br>Peel banana, peel-peel banana<br>Peel banana, peel-peel banana<br><b>Makes you GO Bananas, GO-GO Bananas</b><br><b>Makes you GO Bananas, GO-GO Bananas</b>                                 |

\*Adapted from a 4H Songbook



## Lesson 4: Vegetables

### Activity Parts of the Plant Activity B.

#### Objective

Have students recall parts of the plant and identify edible vegetables/fruit for each part.

#### Activity Supplies

White board; chart paper or newsprint

Parts of the Plant diagram, blown up to 18 x 30 inches long.

6 different colored markers

#### Preparation

- If educators are comfortable with their own drawing, just post a large chart paper up on the white board.
  - c. If educator want some support, enlarge the provided parts of the Plant diagram and lay it under the chart paper. This can be used as a guide for drawing the different parts of the plant.
  - d. Or, educators can pre-trace the outline of the bean plant before class

#### The Activity

- Hang up chart paper with the plant outline or drawing underneath. Use the graphic as a guide for drawing each part of the plant and making it come to life. Use different colored markers for each part of the plant.
- First draw the roots. Making a clear demarcation of the ground as a horizontal line.
  - Prompt the students with facts like, roots grow underground.
  - As you draw the roots, have the students call out veggies that they think are roots.
  - Write their ideas down in the space.
- Repeat this process with stem, leaves, flowers, fruit and seeds, using different colored for each part and the students' vegetable ideas are up on the drawing.
- Revisit the drawing, from the roots up, and share what roots do for the plant, and their different shapes. Identify which of the ideas up on the chart are correct. Which are not? Why? Use the references given the script.
- At the conclusion, ask the classroom teacher if s/he would like the chart, so her students can continue to work on it. They could add new veggies they may find in the school cafeteria or brown bag lunches, or from their home.

This activity could provide photo documentation.