

**Outline of Lesson  
Introduction to CHANGE  
Unit 1, Lesson 1  
Grade 4-5**

**Lesson Time: 60 Minutes**

**Lesson Outline:**

- 1. Introduction to CHANGE Program**
- 2. Learning Contract: Plant Part Poster**
  - Learn the 6 parts of a plant
  - Determine positive learning behaviors as a class
- 3. Hand Washing**
  - Learn proper hand washing technique
  - Make name tags for use during CHANGE classes
- 4. Food Tasting**
  - Students taste foods that may be new to them

**Student Learning Objectives:**

By the end of this lesson students will:


- Be able to identify the 6 parts of a plant.
- Demonstrate how to wash hands properly before preparing or eating food.
- Taste fruits and vegetables that may be new to them.

**References:**

- Patten, Elizabeth; Lyons, Kathy; Stevens, Helen. Healthy Foods from Healthy Soils. Tilbury House, 2003. (plant parts vocabulary)
- Washington State University, Thurston County Extension. Jr. Chef Program.

## Introduction to CHANGE

### Overview (for Teacher)

<b>Pre Class Preparation</b>	<ul style="list-style-type: none"><li>• Write students' names on popsicle sticks (provided)</li><li>• Divide class into learning teams of 4 to 5 students each and decide on vegetable team names</li><li>• Write vegetable team names on large sticks (provided)</li><li>• Have students make a folder for CHANGE materials</li></ul>
<b>Teacher Involvement During Class</b>	 <ul style="list-style-type: none"><li>• Get students in groups of 4 to 5</li><li>• Administer taste-test, put on overhead, have students circle their answers</li><li>• Write out behaviors for the Learning Contract</li><li>• Assist in behavior management of students</li></ul>
<b>Post-Class Teacher Responsibilities</b>	None
<b>Vocabulary</b>	<p><b>Cultivate-</b> the practice of growing crops on land. <b>Health-</b> the state or condition of your body. <b>Nutrition-</b> the study of food and its effect on your body's health. <b>Eating Habit-</b> a way of choosing food that you do regularly, often without thinking about it. <b>Root-</b> the part of the plant that grows underground. Water and nutrients are absorbed from the soil into the roots. <b>Stem-</b> the long main part of the plant from which the leaves and flowers grow. Stems transport water and nutrients from roots to the rest of the plant. <b>Leaf-</b> part of a plant that is usually flat and green, and grows from stems. Leaves make food for the plant through photosynthesis. <b>Flower-</b> the colored part of the plant that produces fruit and seeds. <b>Fruit-</b> the fleshy product of a plant that contains one or more seeds. <b>Seed-</b> the part of a plant from which a new plant can grow.</p>
<b>Critical Thinking Activity</b>	Write three things I hope to learn in CHANGE classes and one positive eating habit I have right now (write in sentences).
<b>Supplementary Activities</b>	<ul style="list-style-type: none"><li>• Have students create their own illustrated vocabulary notebook for the classroom using the vocabulary words from each lesson.</li><li>• Hand Washing Worksheet</li></ul>

**Web Resources**

- 5-a-Day Fruits and Vegetables:  
[www.5aday.com/html/educators/activities.php](http://www.5aday.com/html/educators/activities.php)
- Hand Washing:  
[www.foodsafety.gov/~fsg/f02cword.html](http://www.foodsafety.gov/~fsg/f02cword.html)
- Kids Hand Washing:  
[www.kidshealth.org/kid/talk/qa/wash\\_hands.html](http://www.kidshealth.org/kid/talk/qa/wash_hands.html)

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**Suggested Books for  
Reading in the Classroom**

- Haduch, Bill. Food Rules! Puffin, 2001.
- Landau, Elaine. A Healthy Diet. Franklin Watts, 2003.

## Introduction to CHANGE

### EALR & GLE Alignment

<b>EALR</b>	<b>GLE</b>	<b>Lesson Applications</b>
<b>Communication</b> 1.1 Focus attention (Listens for a variety of purposes and sustains attention) 1.2 Listen and observe to gain and interpret information 3.1 Use language to interact responsibly and effectively with others 3.2 Work cooperatively as a member of a group	*GLE not available at this time	The following apply to all Communication EALRs: <ul style="list-style-type: none"><li>• Learning Contract: Plant Part Poster</li><li>• Taste-test and Classroom Tasting Challenge</li></ul>

## Introduction to CHANGE

### Preparation Outline

#### Activity Supplies

⊗ *Items marked with this symbol may not be purchased using FSNE funding, nor included as part of cost share.*

#### Introduction

⊗ Sunflower plant (as a demo)

#### Pre-test

Cut the following foods into small pieces (1 piece of food per student) (approx. 24 students)

- Lettuce, carrot, chard, green cabbage, broccoli
- 6 plastic cooking trays
- 12-18 small paper plates (2-3 per learning team)

#### Writing Question

Blank 8 ½ “ x 11” cardstock paper (1/2 piece per student)

#### Learning Contract-- Plant Part Poster

- Butcher Paper (4 ft long)
- Copy Plant-Part diagram (with 6 parts)
- Note cards
- Clear tape
- Marker

#### Review

Classroom Tasting Challenge (see Lesson Materials)

<b>Overheads</b>	Taste-test
<b>Student Handouts</b>	<ul style="list-style-type: none"> <li>• Taste-test</li> <li>• Cardstock paper 8 ½ “ x 11” for making name tags (1/2 piece per student)</li> </ul>
<b>Teacher Handouts</b>	Classroom Tasting Challenge (see Lesson Materials)
<b>Changes for ELL Classes</b>	None
<b>Rainy Day Activity Supplies</b>	None

## Introduction to CHANGE

### Outline

### Content

#### Introduction and Lesson Overview (10 Min)

- Write **CHANGE** on Board
- Show Plant Prop
- Explain Curriculum Objectives

Write **Cultivating Health And Nutrition through Gardening Education (CHANGE)** on the board. Underline each initial. Ask students what Cultivating, Health, Nutrition and Gardening means to them.

Have a sunflower plant (or other seasonal plant) as a prop, to show the plant parts.

*For example:*

Hold up the sunflower plant and quickly ask students what they know about this plant. We introduce you to healthy foods that are new and maybe different from things you have tried before. We talk about nutrition and how to make healthy food choices. In the next few months you will get to grow food in your classroom and out in the garden, and then you will prepare and eat foods that you grew yourselves. Your teacher invited me to your classroom because s/he knows that the food you eat can help you grow and stay healthy. S/he thinks that gardening and cooking are fun ways to learn about healthy food.

Today in class, you will:

- Learn the 6 parts of a plant.
- Make a plan for how we will work together while cooking and gardening in CHANGE classes.
- Taste some food as part of the pre-test so I know what kinds of fruits and vegetables you like and do not like.

#### Learning Contract: Plant Parts (15 Min)

- Show Plant Part Poster

- Draw a plant with all its parts on a poster while talking to kids, or ahead of time.
- Introduce the 6 plant parts:
  - **Root-** the part of the plant that grows underground. Water and nutrients are absorbed from the soil into the roots.
  - **Stem-** the long main part of the plant from which the leaves and flowers grow. Stems transport water and nutrients from roots to the rest of the plant.
  - **Leaf-** part of a plant that is usually flat and green, and grows from stems. Leaves make food for the plant through photosynthesis.
  - **Flower-** the colored part of the plant that produces fruit and seeds.
  - **Fruit-** the fleshy product of a plant that contains one or more seeds.

- **Teacher writes behaviors on cards and tapes on poster**



- **Ideas for prompting during brainstorm**

- **Seed**- the part of a plant from which a new plant can grow.

- Explain that we will use this poster to talk about each plant part in following lessons, and to make our plan for how we will work together during CHANGE classes This will be our Learning Contract.
- Brainstorm behaviors for cooking and team work. Have teacher write the behaviors onto note cards and tape note cards to edges of poster.

Ideas for prompting during brainstorming:

<b>Team Work</b>	<b>Cooking/Tastings</b>
Listening	Polite eating: no faces, no yucks
Sharing	Try new things
Positive Comments Only	Wait to eat until everyone is served
Patience	Use cooking tools safely
Helpful (especially w/cleanup)	

### Hand Washing (15 Min)

- **Teach Effective Hand Washing Technique**
- **Sign Learning Contract**
- **Make name tags**

- Demonstrate proper hand washing technique (describe techniques as you model behavior). Wash hands for at least 20 seconds with warm soapy water, rinse and dry completely with paper towel. Places on hands that have the most germs are fingernails and knuckles. It's important to keep your hands clean after you have washed them. (Refer to "Hand Washing" sheet in Lesson materials section for more information)
- Have students in their learning teams go sign the learning contract and then go wash their hands. **NOTE:** Students should sign learning contract below the soil (remember to leave space for food pictures).
- While learning teams are washing their hands, have students make name tags to keep on their desks during CHANGE classes. Each name tag should include:
  - Student's name
  - A drawing of the student's favorite fruit or vegetable

### Food Tasting and Critical Thinking Activity (10-15 Min)

- **Teacher administers Taste Test**
- **Critical Thinking Activity**



- Hand out the taste-test, and put it up on the overhead.
- Read each food, have student take the vegetable and taste it and circle their response. There are no correct answers -- just preferences. **The first food touched is the one they must taste.**
- Collect taste-test and return to educator.
- Critical Thinking Activity: If there is time left, or if some

<ul style="list-style-type: none"> <li>• <b>Classroom Tasting Challenge</b></li> </ul>	<p>students finish early, have them write three things they hope to learn in CHANGE classes and one positive eating habit they have right now (write in sentences).</p> <ul style="list-style-type: none"> <li>• Conduct the Classroom Tasting Challenge: Each time we taste a new fruit or vegetable, or make a recipe in class, we will use our Classroom Tasting Challenge Checklist (show checklist) to record how many students tasted and liked it. All classrooms in the school doing CHANGE classes will have a checklist like this. You will be competing with those classes. At the end of our lessons, the class that tastes the most will win the Classroom Tasting Challenge.</li> <li>• Educator looks at completed pre-tests, and records numbers of students who tasted, liked and didn't like each item, out of total student number, in appropriate columns (Example: 14/20 students tasted lettuce).</li> </ul>
<p><b>Review and Reflection</b></p>	<ul style="list-style-type: none"> <li>• Put Learning Contract in front of class and have students review the cooking and team behaviors.</li> <li>• Review Plant Parts referring to poster.</li> </ul>

# **Lesson Materials**

## **Introduction to CHANGE**













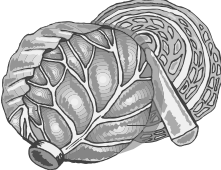







- **Taste-test**
- **Taste-test Tally Sheet**
- **Hand Washing Activities and Information**
- **Hand Washing Worksheet**
- **Sample Classroom Tasting Challenge Checklist**

## CHANGE Taste-test

**Teacher:** Please read the directions aloud and have students circle their answers.

**Student:** Please circle the best answer.

**DIRECTIONS:** First taste each food, and then circle the face that shows how much you like each food. Circle the question marks if you did not taste the food.

#		I like it a lot	I like it a little	I do not like it	I did not taste
1.	<b>Carrot</b> 				???
2.	<b>Broccoli</b> 				???
3.	<b>Chard</b> 				???
4.	<b>Cabbage</b> 				???
5.	<b>Lettuce</b> 				???

Educator: \_\_\_\_\_

Teacher: \_\_\_\_\_

## Taste-test Tally Sheet

School: \_\_\_\_\_

**Directions:** Please make copies of the test for your class and an overhead. Read the directions aloud and have students circle the best answer. Use tick marks under columns to indicate student responses.

#	I like it a lot	I like it a little	I do not like it	I did not taste	Ideal Answer
1					I like it a lot
2					I like it a lot
3					I like it a lot
4					I like it a lot
5					I like it a lot

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# HAND WASHING ACTIVITIES

Adapted from Washington State University Thurston County Extension, Jr. Chef Program.

The objective of CHANGE is to show students how to grow vegetables and prepare them in nutritious dishes and snacks. On most lesson days we will be making some kind of food for everyone to sample. Effective hand washing is important in preventing food borne illnesses.

- Proper hand washing takes time, so set up an efficient plan with your students for hand washing before CHANGE educators arrive. For example, in addition to using a sink in the classroom, children could also use the school bathrooms to speed up the activity.
- Do the following activity with your students to ensure that effective hand washing techniques are practiced.

## ACTIVITY ONE – Hand Washing

### Key Talking Points

Explain to students that we are going to do a hand washing activity. Ask students to close their eyes and pretend to wash their hands just like they normally do. Ask them to act out everything, such as turning on the water, washing, and drying, taking as much time as they usually do.

Have everyone stand up next to their seats and close their eyes. Tell students to get ready to begin their own hand washing routine. Prompt them to start with the cue, “Ready, set and go!” Time students as they begin the hand washing pantomime. They may sit down after they are done. How many students are still standing at end of 20-25 seconds? Research indicates effective hand washing takes 20-25 seconds.

### Explain the importance of washing hands.

- Gets rid of germs
- Helps prevent spread of germs
- Keeps you healthy and safe

### Ask students why it is important to wash hands.

- Accept all answers
- Look for and reinforce answers that indicate the need to rid hands of bacteria/germs
- Ask what is another name for germs? – Bacteria

**Explain that all bacteria/germs are not bad. Some are good for us. Ask students, “When should we wash our hands?” Look for the following answers:**

- Before we eat
- Before and during cooking

- After using the restrooms
- After playing with pets or cleaning pet cages
- After coughing and sneezing
- After working in the garden

If students are having a hard time identifying all the appropriate times to wash their hands, ask leading questions such as, “How many of you have pets? Has anyone here had a cold recently?”

### **Explain how to wash hands.**

- Scrub each entire hand, front and back.
- Use soap and warm water.
- Clean under and around nails, rub nails against opposite palm.
- It should take about 20-25 seconds - enough time to sing “Twinkle, Twinkle Little Star” or “Carrots, Peas and Broccoli.”
- Rinse well and dry with a paper towel.
- Use a paper towel to turn off water, and open the bathroom door.

### **Re-emphasize the importance of washing hands and when to do it.**

### **ACTIVITY TWO – Ask Hand-Washing Questions**

#### **Give out the Hand Washing Worksheet.**

Write questions on the board or discuss them orally. Have students fill in the blanks about hand washing.

- 1. Wash your hands before making or eating food.**
- 2. Use soap and warm water to wash your hands.**
- 3. Wash your hands for 20-25 seconds.**
- 4. Wash your hands before harvesting and after working in the garden.**
- 5. Cover you mouth when you sneeze or cough, then make sure to wash your hands.**

### **ACTIVITY THREE – Learn Hand Washing Pledge**

I will:

Always wash my hands before cooking and after gardening

Follow the safety rules

Take a small taste of everything we prepare

Make healthy food choices, and

Exercise to keep fit

## Hand Washing Information

Washing hands before touching, preparing, and eating food and after gardening activities is a major step in preventing food borne illnesses; therefore this topic will be revisited in each lesson. For this lesson, emphasize the importance of washing hands to prevent contaminating food with bacteria that may be on hands. Hands need to be washed with warm water and soap before handling food and after handling raw foods such as meat, poultry, fish and eggs.

The recommended method for washing hands is to lather up both sides of each hand for at least 20 seconds. Students can sing either the “Happy Birthday ” song twice or “Carrots, Peas and Broccoli” both of which take about 20-25 seconds to sing. Scrub vigorously by rubbing hands and pay special attention to scrubbing around and under fingernails. Use plenty of water to rinse off soap and bacteria. The water needs to run with enough force to help loosen bacteria from skin and wash it down the drain.

It’s important to cover the mouth when coughing or sneezing, but then it’s necessary to re-wash hands before continuing to handle food.

Waterless hand washing solutions are becoming popular. They contain alcohol, which kills bacteria. However, research shows that the alcohol typically kills only the top layer or two of bacteria, leaving some on the hands. If using these, it is best to wash with briskly running water to loosen bacteria from skin. If no water is available, at least use paper towels to help rub off bacteria. Soap and warm water remain the preferred method of hand washing.

Many people wonder whether or not to use “antibacterial” soaps. These products are usually more costly than regular soap and are not necessarily more effective. Regular soap breaks apart bacterial cells and is effective especially when coupled with scrubbing and brisk rinsing. Antibacterial compounds are unnecessary and may contribute to the development of bacterial resistance to antibiotics - a growing medical concern.

### **HAND WASHING SONG**

#### **Carrots, Peas and Broccoli**

*To the tune of: Twinkle, Twinkle, Little Star*

Carrots, peas and broccoli,  
Vegetables are good for me.  
For my snacks and in my lunch,  
Veggie sticks are great to munch.  
Carrots, peas and broccoli,  
Vegetables are good for me.

# Hand Washing Worksheet

Name \_\_\_\_\_

Date \_\_\_\_\_

Fill in the blank with a word from the word box.

1. Wash your \_\_\_\_\_ before preparing or eating food.
2. Use \_\_\_\_\_ and \_\_\_\_\_ to wash your hands.
3. Scrub your hands for at least \_\_\_\_\_ seconds.
4. Playing with pets and gardening can contaminate your hands with \_\_\_\_\_.
5. Cover your mouth when you sneeze or \_\_\_\_\_, then make sure to wash your hands.

warm water

soap

20

hands

cough

germs

## Sample Classroom Tasting Challenge Checklist

Mrs. Jicama's Class: Grade 4

	Tasted	Liked	Didn't Like	Tried Recipe at Home
Lettuce	20/20	18/20	2/20	
Carrot				
Broccoli				
Chard				
Green Cabbage				
Carrot Jicama Salad	20/20	14/20	6/20	5/20
Sesame Chard Salad				

**Directions:** Use this sample to create your own checklist for each classroom on a large piece of poster board. Write the name of each fruit, vegetable, or recipe in the left-hand column as your class tastes it. After tasting, have students raise their hands to show whether or not they tasted each item, and whether or not they liked it. Record the number of students who raise their hands out of the total number of students in class that day. After trying a recipe in class, hand out the recipe for students to make at home. One week later, have students raise their hands to show whether or not they made the recipe at home with their families, and record the number of students who raise their hands out of the total number of students in class that day.