

Week of January 6th: **Citrus Tasting**

Inspired by Cooking with Kids

(aces.nmsu.edu/ces/efcs/ICAN/documents/cwk-citrus-tasting-k-1-lesson-plan.pdf)

Updated 1-2-19

Happy New Year! This week we will prepare and taste several varieties of citrus fruit: navel oranges, Cara Cara oranges, Satsuma mandarins, and grapefruit. Children will learn about the nutritional benefits of citrus fruits, discuss the differences in flavor among the varieties sampled, and vote on their favorite.

Materials

All fruit has been washed and placed in a bag or container for each class. Each class will receive the following:

- Information cards about various citrus fruit (includes photograph, nutritional information, etc)
- Dry erase board and markers
- Hand soap for washing hands
- Paper plates and trays (Please wash trays with soap and dry after use)
- Knives and citrus peelers (either plastic serrated or metal paring, whichever you feel your children are comfortable using) (Please wash with soap and dry after use)
- Paper (8 1/2x11), markers/colored pencils, masking tape (for pictures)
- 2 ½' x 3' white paper to cover food work surface (makes cleaning easier) please place in worm compost or recycle afterwards. *If you'd like to use paper to cover tables, please obtain it before class from the staff room.
- 2 navel oranges per class (1 per 45 minute group)*A navel orange is a type of sweet orange (It is called a navel orange because it has a "bellybutton")
- 1 grapefruit per class (1/2 per 45 minute group)*Grapefruits are actually a cross between a sweet orange and a pumello!
- 2 Satsuma mandarins per class (1 per 45 minute group)
- 2 Cara Cara Navel oranges per class (1 per 30 minute group)*Cara Cara oranges look the same as a regular orange, except they have pinkish flesh (like a ruby grapefruit) and a low acid flavor. They are a type of navel orange that is said to have originated from a cross between two different types of navel oranges). These were harvested from the tree in front of the MPR. It is a type of Navel orange so it has a "bellybutton). ©

If you wish to serve different types of citrus fruit, you are welcome to purchase other varieties or more of the same varieties (ie kumquat, blood orange, lemon, lime). In 45 minutes, there is only enough time for about 4 types UNLESS the parent volunteer cuts the fruit in advance.

Overview (5-10 min)

Today we are going to study a type of fruit that is in season during winter. The outermost layer of this type of fruit is called the peel. The surface of the peel is called the zest and just underneath that lies the a spongy white colored layer called the pith. Inside of the peel, the fruit is divided into segments containing multiple juice filled "kernels" which are typically juicy and tart (sour flavored). Can anyone guess what type of fruit we are going to learn about today? [CITRUS!!] Citrus are ripe this time of year and are very healthy for you as they are high in vitamin C, potassium and fiber! Today, we will explore and taste four types of citrus fruits: navel oranges, cara-cara navel oranges (grown at school!), Satsuma mandarins, and grapefruits.

Directions

(For additional information, please refer to the lesson plan from Cooking with Kids)

- 1. Children may work outdoors or in G40 (if available) this week.
- 2. Divide the class into 4 groups of students with ~3 students per group.
- 3. Begin by asking children to wash their hands with a wipe and hand sanitizer.
- 4. Give each group one or two trays, one or two knifes/citrus peelers, paper towels, and a paper plate
- 5. Preparation and Exploration (10min): Each group of students will receive one type of citrus fruit. They are responsible for:
 - a. Writing the name of their fruit in their notebooks and drawing a picture of it.
 - b. Preparing the fruit: peeling and separating segments and cutting, if necessary into 12-14 pieces; enough for each student. (Some pieces may be very small and that is fine, not all students will want a large piece).**Alternatively, adults can help prepare fruit to save time
- 6. Presentations and Tasting (15min)
 - a. **Kindergarteners & 1**st **grade**: Volunteer parent will leads a discussion about the appearance of the fruit: color (interior/exterior), size, skin texture, stem/blossom end?
 - b. **2**nd **and 3**rd **grade**: Ask each group of students to come to the front of the class to present their fruit. (size, shape, color *inside and out, smell). Children will pass out the fruit to their classmates.
 - c. AFTER discussing a fruit, students will taste the fruit that was just discussed.
 - d. Repeat for each fruit.
 - e. <u>After students finish tasting all of the fruit</u>, discuss/compare the which was most sour, which was bitter, which was sweetest,? <u>Model the use of descriptive language</u>. (ie, the Cara Cara orange may have flavors of cherry, rose petal, orange and blackberry). Record thoughts about the flavor on the chart as well.
- 7. Record remarks on the whiteboard chart and vote for their favorite.
- 8. Need added tips? Please refer to the "Cooking with Kids lesson plan" below. ..."
- 9. Wash hands before returning to class. (5 min)

Example Chart on Whiteboard (parent fills in the name of the fruit and asks for input about the other characteristics):

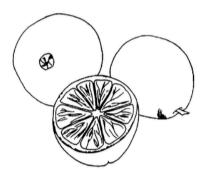
Fruit	Color inside/outside	Flavor	Comments	Votes
Navel orange				
Cara Cara orange				
Satsuma				
Grapefruit				

Helpful Tips for the Tasting Lesson

Hand Washing

Washing hands properly will remove nearly all the germs that get on your hands during the course of daily activities. Do not use antibacterial hand sanitizer when working with food.

- Wet your hands with clean warm water
- Apply soap
- Rub your hands together vigorously and scrub all surfaces
- Scrub for 20 seconds (sing a,b,c's)
- Rinse with clean water



Preparing Citrus Fruit
All fruits and vegetables
are perishable so should
be used as soon as
possible or refrigerated.
Use a colander inside a
bowl when washing them,
so that they do not come
into contact with the
classroom sink. Use clean
cool running water.

Preparing Plates of Food

The lesson plan is designed for three groups of students. Students will taste four varieties of fruits or vegetables. However, it is easier for students this age to draw and then taste one variety at a time. However you choose to prepare items, each group should have the opportunity to see and draw each fruit or vegetable whole. After the students draw one variety, taste that variety together before passing out another.

Using the Tasting Chart

Encourage students to use all five senses while exploring and tasting the fruits or vegetables. Ask questions about size, shape, and color. Model the use of descriptive language. Give examples.

Ask questions that allow children to choose from opposites or answer with "yes" or "no." "Is it wet or is it dry?" "Is it smooth or is it bumpy?" Do not ask, "What does it taste like?" Children at this age are not likely to be able to answer with sweet, sour, bitter, or salty, although they may be able to discern these flavors.

It is important that students be able to choose whether to eat the food or not and be allowed to practice using their senses. Acknowledge their likes and dislikes by noting that all people are different and comment on differences in an accepting manner. It is important not to praise children who like a fruit or vegetable more than those who dislike it.

Choice and personal preferences are an important part of tasting lessons. Tasting foods is always voluntary. Requiring children to taste new foods may make them resistant to eating a variety of foods.

Grades K-1: Citrus Tasting Lesson Plan

Preparation (15 minutes)

- Wash your hands. Wash the citrus fruits in a colander using cold running water. Remember to keep the citrus varieties separate. Keep three fruits of each variety whole (for drawing). Peel and section or cut the remaining fruit for the class.
- Arrange the tables to form three groups. Wash or cover the tables. Divide the students into three groups. Direct students to wash their hands with soap and warm water.

Farmer Photo and Food Information (15 minutes)

- 3. Look at the farmer photograph with the students and read the caption.
- 4. Use a world map or globe to show students where they live and where citrus fruits first grew.

Using the Tasting Chart (25 minutes)

- 5. Draw a large tasting chart on the board or on large paper to use as a guide for the class. Write the name of each variety of citrus fruit, one in each box. Place one whole citrus fruit of one variety on a plate and give to each group. Ask students to draw the citrus fruit in one box on their tasting chart.
- 6. Pass out food trays and napkins. Remind students to wait to taste the citrus fruits until directions are given. Pass out the fruit sections and taste them taking turns describing how the citrus fruit looks, smells, tastes, and feels. Repeat the process of drawing and tasting until all the varieties have been tasted. Tasting foods is always voluntary. Requiring children to taste new foods may make them resistant to eating a variety of foods.
- Vote on which citrus fruit was the favorite. Complete the bar graph to show how the class voted. Direct students to the additional activity page.

Clean Up (5 minutes)

8. Encourage students to take responsibility for cleaning up. Ask students to clean their tables, dispose of trash, and clean up the floor. Take the food scraps to the compost area if you have one. Share any remaining food with someone in your school or community.

Learning Objectives

- Explore and reinforce healthy food choices.
- Practice observation and drawing skills.
- Use senses to explore personal preference.
- Distinguish and articulate similarities and differences.
- Learn graphing concepts and skills.

Drawing Suggestions

- Use colored pencils and crayons.
- Vary line thickness.

Enrichment Options

- Plant citrus seeds to grow classroom plants.
- Create a fruits and vegetables bulletin board or display.
- Invite a farmer to speak to your class.
- Take a field trip to a farmers' market or local farm.

Citrus Tasting Supplies

- Six each of four varieties of citrus fruits, (24 total): navel orange, blood orange, grapefruit, and tangerine
- Twelve paper plates
- One plastic citrus peeler or knife
- Small paper food trays and napkins, one each per person

Adapt this information for your classroom discussion.

Citrus Fruits

Nutrition Facts and Citrus Snacks

Oranges, grapefruits, tangerines, lemons, and limes are all citrus fruits. Most citrus fruits have bitter peels and are sweet and juicy inside. Citrus fruits are part of the fruit food group. Most of them are very high in vitamin C, which helps keep you from getting bruised when you're bumped.

Citrus fruits make **refreshing**, juicy snacks. Have you ever made homemade lemonade or an orange strawberry smoothie?

Citrus Fruits in History

Most citrus fruits first grew in Asia thousands of years ago. Oranges first grew in China sometime between 2000 and 3000 B.C. In the year 1200, travelers brought oranges from China to France and Italy. In 1493, Christopher Columbus brought oranges from Spain to the Americas. Today, most citrus fruit in the United States is grown in Florida, California, and Texas.

Growing Citrus Fruits

Citrus trees are **subtropical** plants, which means that they need warm weather to grow. It takes about ten years before an orange tree grown from seed will **bear** fruit. Orange trees live for a very long time, often from fifty to eighty years. A full-sized orange tree bears an average of 1,500 oranges per year.

Vocabulary Words refreshing subtropical bear

Where did oranges first grow?
How did they get to the Americas?
In the United States, where do most citrus fruits grow? Why?

Satsuma



Navel Orange







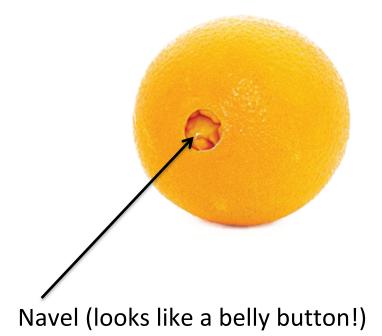
Grapefruit







Satsuma Mandarin





Cara Cara Navel

Navel





Grapefruit (Pink Red, or White)