



Preschool Home Visit Learning Plan Mandarin Orange

Harvest Objectives

Families will describe the life cycle of a mandarin orange.
Families will identify that mandarin oranges grow on trees.
Families will taste a piece of mandarin orange.



Harvest Vocab

Firm Fruit Pollination Smooth Tree

Materials & Prep

Mandarin Oranges (enough for each family member to taste small $\frac{1}{4}$ pieces)
1 Set Mandarin Orange Life Cycle large cards (see separate document to print)
1 Set per Child Mandarin Orange Life Cycle small cards (see separate document; set to print 4 pages per sheet and then cut each sheet into quarters for small cards)
Images (included at end of learning plan)
Taste Test Chart
Stickers (or small Post-It Notes)

Literature Connections

Orange Foods by Patricia Whitehouse
Eating the Alphabet: Fruits & Vegetables from A to Z by Lois Ehlert
A Fruit Is a Suitcase for Seeds by Jean Richards

Warm Up

- In order to engage the family and activate prior knowledge, show them the mandarin oranges and pass them around so everyone gets to hold and/or touch them. Do not tell them what they are. Tell them to think of the name for the food, but to keep their answer inside their head. Then when everyone has held a mandarin orange, ask them, "What is this called?" Consider having everyone say the answer aloud on the count of three, this way you'll know who in the family knows. Then discuss, have ever seen one before? Eaten one before? How was it prepared? Where do they think mandarin oranges come from? How do they grow? (On trees, bushes?)
- In order for the family to explore more about the mandarin orange life cycle, have a common experience, and think about what they know, tell them they need to put the mandarin orange life cycle in order. Using the small cards, allow one or two minutes for them to work and discuss. If you prefer, you may give them the hint to start with the tree with flowers. Then ask them, "Why do they think one piece goes before, or after, another? How do they know?"
- Note: For very young preschool students, have them work independently with an adult, and give them only the first two pieces and ask them to put them in order. Then give them the next two, to add on, until the entire life cycle is complete. Alternatively, you could put out the large cards in order, discussing each briefly. Then the young preschool child could be given the small cards to match with the larger cards.



Explain

- Using the large mandarin orange life cycle cards discuss the correct card sequence.
- Then to review, have all the family act out the entire plant life cycle.
 - Mandarin tree with flowers--stretch arms up to the sky, as branches reaching out towards the sun and fan hands out to form flower blossoms
 - Pollination--one hand's pointer finger becomes a pollinator and touches a friend's flower respectfully
 - Petals falling down (wilting)--petals pretend to fall off of flower hand
 - Flower swelling--flower hand is a small fist representing the beginnings of a fruit
 - Immature fruit--flower hand grows a bit larger
 - Mature fruit--fruit grows larger (mandarin oranges are fruit because they have seeds inside)
 - Mandarin tree with mandarins--stretch arms up to the sky, as branches reaching out and hands are round, representing fruit
 - (optional) Picking and eating fruit--now pretend you are yourself standing in front of a fruit tree, reach and stretch wayyyy up for the best looking fruit on the tree, pick it off the tree, peel it and take a BIG bite of mandarin orange.
- Discuss the picture that shows the mandarin orange growing on the tree, and explain the word "tree," if needed. Can they think of any other foods that grow on trees? (Apples, avocado, pears, etc.) Explain the words "smooth" and "firm" along with other examples.
- Explain why we should eat mandarin oranges (healthy blood, healthy eyes, and healthy immune system) and for each come up with a reason to help the family remember. For example, for healthy immune system they can shake one finger while saying "no" and then put a hand on their forehead while saying "fever." Also explain how to pick a good mandarin orange (skin should be free of marks and bruises and a deep red-orange color). Please see the next pages for images to share with the family.

Taste Test

- Peel and cut each slice into two pieces.
- Create a chart that says "I Like" with a smiley face and "I Don't Like" with a sad face. Give each family member a sticker, and ask them to vote by placing it in a column. Count the number of people that like and don't like mandarin oranges and write that number in each column.
- Review with the family how mandarin oranges grow and nutrition benefits.

Taste Test Extension

Rule of 15 "Put a food on the table at least 15 times to see if a child will accept it." Susan B. Roberts, Tufts University Nutritionist and Co-author of [Feeding Your Child for Lifelong Health](#)

For an additional tasting experience, prepare this recipe with the family having each member help in an age-appropriate manner.



Preschool Home Visit Learning Plan
Mandarin Orange

Orange Butterflies (for about 4 servings)

(adapted from: http://www.snackpicks.com/en_US/for-kids/fruit-bug-snacks-slideshow.html)

2 Mandarin Oranges (peeled)

8 Oval Crackers

Plate (1 per person)

1. All participants should wash their hands.
 - a) Wet hands with warm water
 - b) Apply hand wash (soap)
 - c) Lather and wash for AT LEAST 15 seconds (the length of the ABC song)
 - d) Rinse both sides of hands with water all the way up to the wrists
 - e) Dry hands and shut off faucet with towel
2. Have each family member peel the oranges and break them into halves.
3. Demonstrate how to put two crackers between the mandarin orange wedges to hold the cracker wings. Have each family member create one butterfly. Serve and enjoy!



How do **Mandarins** grow?



Mandarins grow on a small tree with shiny leaves and fragrant flowers.

After pollination, the mandarin flowers swell to become the mandarins we eat.



Why should we eat **Mandarins**?

Vitamin A



Healthy eyes

Vitamin C



Healthy immune system
(prevents colds, heals cuts)

Folate



Healthy blood