

Curriculum Ideas

Thinking Maps

Create a Bubble Map describing a mandarin. Use the five senses to describe the fruit.

Research and Investigation

1. Citrus fruit is not just for eating. Investigate the different uses of citrus fruit including the use of the peel, rind, and aroma.
2. How are seedless citrus fruit trees developed?

Citrus Math

Look on the internet to determine which states grow mandarins and create a state production graph.



Source: *Network for a Healthy California*– Monrovia USD.

Got Vitamin C?

Mandarins are an excellent source of vitamin C, which is a water-soluble vitamin that aids in wound healing and helps keep gums healthy. Vitamin C also functions as an antioxidant to help prevent chemical damage to cells and therefore strengthens the immune system. To help you determine if a food is a good or excellent source of vitamin C, look at the following information on a food label:

- ◆ A “source” of a nutrient will have 5-9% of the recommended daily value for an average person.
- ◆ A “good source” of a nutrient will have 10-19%.
- ◆ An “excellent source” of a nutrient will have 20% or more.
- ◆ If you don’t have a food label handy, produce like citrus, peppers, broccoli, spinach, and berries are excellent sources of vitamin C.

Source: Adapted from www.harvestofthemonth.com, mandarins

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Food for Thought

Sweet Mandarins



Nutrition Facts

Serving Size: 1 medium mandarin (88g)	
Calories 47	Calories from Fat 2
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 2mg	0%
Total Carbohydrate 12g	4%
Dietary Fiber 2g	6%
Sugars 9g	
Protein 1g	
Vitamin A 12% Vitamin C 39% Calcium 3% Iron 1%	

Source: www.nutritiondata.com





Tangy Facts

- Mandarins are native to southeastern Asia and the Philippines.
- The name “tangerine” is used to refer to mandarins of a deep, orange-red color and derived from a mandarins that originated in Tangier, Morocco.
- There is no waste in the processing of citrus fruits. The peel is used for making oils, marmalade, pectin, and citric acid, the seeds are used to make oils, and the juice is used for fresh juice, syrup, vinegar, and liquor.
- California mandarins are harvested from October through May and must be clipped-off the tree.
- Clementine Cuties are available from mid-November to January therefore they are known as the “Christmas Orange”.
- One medium mandarin provides an excellent source of vitamin C, a good source of vitamin A, and a source of the B-vitamin folate.

Source: <http://www.harvestofthemonth.com>, Mandarins

Physical Activity Corner

Safe Routes to School

In the past 30 years, the number of children who walk or bike to school has declined from over 50 percent to fewer than 15 percent. A new federal transportation bill has created a Safe Routes to School program. Visit their site below to learn more.

- Poll students on how they get to/from school (walk, bus, carpool).
- Discuss factors that influence how they get to/from school (safety, convenience, lack of transportation).
- Determine what would need to change in order for more students to walk or bike to/from school.
- Develop a writing assignment that discusses the way schools or the local community can assist in creating safe routes to school.

Source: Adapted from bikesbelong.org

Tasting Trio Zipper Fruit

Materials (per class of 32)
napkins

Ingredients
Whole mandarin or tangerine
(Clementine Cuties work best)



Safety Precautions

Have students wash their hands before peeling fruit.

Making the Recipe

1. Demonstrate to students how easy it is to peel a mandarin.
2. Have students peel and eat their fruit.
3. Math, science, and literature can be incorporated with this activity.
4. Have students peel and squeeze their own juice as an alternate activity.

Source: *Network for a Healthy California*, Monrovia USD

Home Grown Facts

- California leads production of fresh citrus and ranks second nationally (behind Florida) in total citrus production.
- California is the nation’s leading domestic producer of Clementine Cuties.
- Of the 250,000 acres of citrus grown in California, about 10,500 acres are harvested from mandarins which is a total value of about \$38.2 million.
- Leading counties in mandarin production include Tulare, Riverside, San Diego, Imperial, and Ventura.



For more information, visit :
www.cdffa.ca.gov and www.nass.usda.gov

Getting to Know Mandarins

Mandarin Cultivar	Marketed as	Popular CA grown varieties
Common Mandarin	Mandarins and tangerines	Clementine, Honey, Sunburst, Dancy, Pixie
Satsumas	Satsuma or “Emerald tangerine”	Kara, Owari, Silverhill
Mandarins Hybrids	Tangelos (tangerine-pomelo), tangors (tangerine-orange)	Minneola tangelo, Sampson tangelo, Thompson tangelo, King tangor

For more: <http://citrusvariety.ucr.edu/citrus/mandarins.html>

Website Resources and Books

- <http://www.ers.usda.gov>
<http://aggie-horticulture.tamu.edu/citrus/mandarins.htm>
http://www.hort.purdue.edu/newcrop/morton/mandarin_orange.html
<http://www.cachampionsforchange.net> (recipes)
Ambrosia by Dan Manalang
Harvest Year by Chris Peterson
All About Citrus and Subtropical Fruits by Maggie Klein
What Grows from a Tree? by Lola Schaefer

January Events