

SAVORING CALIFORNIA: A COMPARATIVE TASTING OF CALIFORNIA FRUITS AND VEGETABLES

OVERVIEW

Students taste two or more varieties of a particular kind of fruit or vegetable, develop language to describe its nuances, and learn about its growing requirements and seasonality.

GRADE LEVEL: 3-5





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CALIFORNIA FOOD FOR CALIFORNIA KIDS™ downloadable resource

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Learning in the Real World

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SAVORING CALIFORNIA: A COMPARATIVE TASTING OF CALIFORNIA FRUITS AND VEGETABLES

TASTING OVERVIEW

California grows nearly half of the fruits, vegetables, and nuts in the United States, thanks to its rich soil, multitude of microclimates, and long growing season. While most Californians are familiar with some of these crops—oranges, for example—they may not know the wide variety of citrus and other produce grown here. By sampling and describing an array of fruit or vegetable varieties, students learn about California’s seasons and microclimates, develop their palates, and expand their vocabularies.

LESSON OVERVIEW

Students taste two or more varieties of a particular kind of fruit or vegetable, develop language to describe its nuances, and learn about its growing requirements and seasonality.

GRADES

3-5

LENGTH

One 45-minute class period

LEARNING OBJECTIVES

Students will:

- Become familiar with some of the fruits and vegetables grown in California;
- Expand their vocabularies to describe the taste, texture, and smells of food;
- Learn ways to incorporate more California-grown produce into their diets throughout the year.

STANDARDS CONNECTIONS

NEXT GENERATION SCIENCE STANDARDS

- Science and Engineering Practices - Planning and Carrying Out Investigations - 3.3-5. Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution.
- Disciplinary Core Ideas - Energy in Chemical Processes and Everyday Lives - 5-PS3.D. The energy released from food was once energy from the sun that was captured by plants in the chemical process that forms plant matter (from air and water).
- Disciplinary Core Ideas - Interdependent Relationships in Ecosystems - 5-LS2.A. The food of almost any animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants.

COMMON CORE STATE STANDARDS – ENGLISH LANGUAGE ARTS

- Language - L.3.5, L.4.5, and L.5.5. Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

VOCABULARY

- Varieties (as in fruit or vegetables)
- Hybrids
- Seasonal
- Microclimate

(Also see the “Fruit and Vegetable Adjectives” student handout)

MATERIALS

- 2 to 5 varieties or hybrids of one type of fruit or vegetable, enough of each to display whole and to enable all students to taste
- Toothpicks
- Serving trays
- Napkins
- Waste bucket (see Preparation)
- Student handouts
- Map of California

PREPARATION

- Purchase two or more varieties of a fruit or vegetable that is in season in your area. For example, you might provide different citruses such as oranges, tangerines, grapefruit, or pomelos. Provide enough so that each student can taste each variety. Oranges, apples, sweet peppers, tomatoes, leafy greens, berries, and pears are usually available in grocery stores and at farmers’ markets.

- For each of the varieties you have chosen, find out where it is grown, any special conditions or requirements for growing, and when it is in season where you live.
- Thoroughly wash the produce and display examples of the whole items on a tray. Cut the rest into bite-size pieces for students to taste, and place the pieces on trays. Provide toothpicks for picking up food samples.
- Have a waste bucket on hand for collecting fruit and vegetable scraps to compost. (Note that citrus peels may take a while to break down, so you might want to cut them into smaller pieces.)
- Make copies of the “Taste Test” student handout for each student. For the “Fruit and Vegetable Adjectives” student handout, you may make one copy for each small group or table, or project it onto a screen for the whole class to see.

DIRECTIONS

- 1 Show students the tray with the whole produce, ask them to identify each variety, and discuss the seasons when each is available in your region.
- 2 Tell students that they will have the opportunity to taste these varieties, which are all grown in California and are currently in season. Discuss what it means to be “in season.”
- 3 Distribute copies of the “Taste Test” student handout and explain that one goal of this lesson is to expand the students’ vocabularies for describing foods. They should only use words that provide specific information about the produce—avoiding words such as “gross” or “yucky” that are not descriptive. Have them refer to the “Fruit and Vegetable Adjectives” student handout for more accurate descriptors.

- 4 Pass around the whole varieties of the fruit or vegetable and instruct students to hold each one, noticing its weight, color, texture, and smell. Ask them to record their observations on the student handout.
- 5 Distribute cut-up food samples, telling students to try one taste of each variety. Invite them to continue to complete the student handout for each variety that they taste.
- 6 Discuss their impressions, encouraging them to expand their descriptions.
- 7 Using a map of California, discuss where that fruit or vegetable is grown, what special conditions or requirements are necessary for its growth, and when it is in season in the region.
- 8 Discuss easy ways to include these foods in one's diet.

EXTENDED LEARNING

- Have students research the health and medicinal benefits of the fruit or vegetable they explored in the activity.
- Challenge each student to find a recipe that features their favorite fruit or vegetable.
- Visit a farmers' market to see the range of seasonal fruits and vegetables that are grown in the region.

ASSESSMENT

Read through completed student handouts to evaluate students' ability to use a variety of vocabulary words to accurately describe fresh foods.

RESOURCES

- *California Agricultural Almanac*. <http://www.calagalmanac.org>. This website provides an interactive map and database of crops, farms, farmers' markets, and agriculture events in California.
- "California _____ [almond, citrus, tomato, etc.]." A search term for finding one of the many boards, councils, or commissions (such as the Almond Board of California) that represent each of California's largest crops and provide state-specific information about that crop.
- *California Crop Harvest Calendar*. <http://www.pickyourown.org/CAharvestcalendar.htm>. A listing of typical harvest dates for a wide range of fruits and vegetables grown in California.
- "Fruit Facts." <http://www.grownincalifornia.com/fruit-facts/>. Information about California fresh fruit, including the availability of specific fruit varieties and the origin and nutritional content of and recipes for each fruit type.
- "Harvest of the Month: Produce List and Criteria." <http://www.harvestofthemonth.cdph.ca.gov/product-list.asp>. A list of the California-grown fruits and vegetables featured each month in the Harvest of the Month school lunch program.
- *Seasonality Charts*. CUESA. <http://www.cuesa.org/eat-seasonally/charts>. Extensive lists of the produce available at the Ferry Plaza Farmers' Market in San Francisco, useful for determining seasonality in other Northern California locales.
- Sustainable Seed Company. <http://sustainableseedco.com/>. Descriptions and growing information about lots of different vegetable and other plant varieties.

BACKGROUND

California's mild, Mediterranean climate allows farmers to grow an astounding diversity of fruits and vegetables. But even here, most crops are harvested and available fresh only during specific times of the year. That's because nearly all food plants grow best when day lengths and soil and air temperatures are within that plant's optimal ranges.

Seasonality of food refers to the time of year when a given type of fruit or vegetable is at its peak harvest and has the best flavor. In stores and markets, fruits and vegetables "in season" are also often cheapest and freshest. While today's global trade enables us to buy just about any fruit or vegetable at any time of the year, out-of-season produce often travels over 1,000 miles from farm to table, and may come from as far away as South America or Asia.

Seasonality charts can provide a general sense of when specific fruits and vegetables are ripe in your area. Keep in mind, though, that most of these charts show general growing seasons, and are not specific to local microclimates or plant varieties, which may cause a crop to come into season earlier or later than shown.

When gardeners and botanists talk about plant varieties, they are referring to something more specific than just a selection of plants. A variety is a variant of the species that differs from others of the species in minor but heritable ways. For example, different varieties of apples have skins that are deep red, pink, golden, and green. A variety's name is written in italics as the third word in the plant's botanical name, after the genus and species (such as celery: *Apium graveolens* var. *dulce*).

People choose to grow different varieties of a fruit or vegetable for a number of reasons. Some varieties, like early or late tomatoes, can extend the growing season. Some are more disease- or drought-resistant, or more adaptable to different growing conditions, than other varieties. Still others offer interesting colors or pleasing flavors.

TASTE TEST

FRUIT OR VEGETABLE: _____

VARIETY NAME	APPEARANCE	SMELL	TASTE	WHERE GROWN	GROWING REQUIREMENTS	SEASON HARVESTED	OTHER NOTES

STUDENT HANDOUT

FRUIT AND VEGETABLE ADJECTIVES

acidic	harsh
aftertaste	hearty
aromatic	heavenly
astringent	hot
bitter	intense
bland	intriguing
creamy	juicy
crisp	layered
crunchy	leathery
delicious	lemony
delightful	light
distinctive	lightly salted
divine	lip-smacking
drippy	lively
dry	luscious
dull	mashed
extraordinary	mellow
fantastic	mild
fiery	minty
flat	mixture of
flavorful	moist
flavorless	mouth-watering
fleshy	nutty
fragile	oily
fresh	overpowering
fruity	penetrating
gorgeous	peppery
greasy	pickled
gritty	piquant

STUDENT HANDOUT

FRUIT AND VEGETABLE ADJECTIVES, CONTINUED

plain	sticky
pleasant	strong
plump	succulent
prickly	sugary
pulpy	superb
pungent	sweet
rancid	sweet-and-sour
refreshing	syrupy
rich	tangy
ripe	tantalizing
robust	tart
rotten	tasteless
rubbery	tasty
salty	tender
satiny	terrific
savory	tough
scrumptious	unflavored
sharp	unsavory
silky	unseasoned
smelly	vanilla flavored
smoky	velvety
smooth	vinegary
soothing	warm
sour	waxy
spicy	zesty
spongy	zingy
sprinkled	
stale	
steamed	



ABOUT THE CENTER FOR ECOLITERACY

The Center for Ecoliteracy is an internationally recognized leader in systems change innovations in education for sustainable living. Since 1995, the Center has engaged with thousands of educators from across the United States and six continents. The Center offers publications, seminars, academic program audits, coaching for teaching and learning, in-depth curriculum development, keynote presentations, and technical assistance. Books authored or coauthored by the Center for Ecoliteracy include *Ecoliterate: How Educators Are Cultivating Emotional, Social, and Ecological Intelligence* (Jossey-Bass, 2012); *Smart by Nature: Schooling for Sustainability* (Watershed Media, 2009); and *Ecological Literacy: Educating Our Children for a Sustainable World* (Sierra Club Books, 2005).

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