

Classroom Bites

Cherries



Lapin - Sweet

Did You Know

- Cherries are in the rose (rosaceae) family that also includes apples and other “stone fruit” such as peaches, apricots, and plums. Stone fruit species produce fruit that has one seed, called a pit.
- Domesticated cherries are believed to have been first cultivated in eastern Europe and western Asia thousands of years ago.



Rainier - Sweet



Montmorency - Tart

- There are over 1,000 varieties of cherries being grown in the United States. There are two main types grown commercially, “sweet” and “tart”. Sweet cherries, as the name suggests, are sweeter than tart cherries and are also larger. They are typically eaten fresh. Lapins, Sweetheart, Rainier, Royal Anne, Stella, Lambert, and Skeena are a few of the sweet cherry varieties grown in Montana. Tart cherries, also called “sour” or “pie” cherries, are smaller, more tart tasting, and are typically used in baked goods. Tart cherry varieties grown in Montana include Evan’s Bali, Montmorency, and Sweet Cherry Pie. Dwarf sour cherries are a new, bush-type cherry that produces tart cherries but is easier to pick and more cold-hardy.
- Most of the sweet cherries grown in Montana are grown on the east side of Flathead Lake in western Montana, where the climate is protected from extreme winter temperatures and spring frosts. “Flathead Cherries” are not a variety of cherry, but the name refers to all sweet cherries grown in that region. The Flathead cherry industry was established in 1895.
- On average, Montana growers produce two million



pounds of sweet cherries each year. More than 640 acres of sweet cherries and 90 acres of tart cherries were growing in Montana in 2017.

- Chokecherries are a shrub-like member of the cherry family that are native to Montana and most of the United States and Canada. Native Americans have traditionally eaten the fruit and used other parts of the plant for medicinal uses. Crushed chokecherries are one of the ingredients in pemmican, a traditional food that also includes dried game meat, bone marrow, or lard. This high energy food can be stored to be eaten later, such as during the winter. Chokecherries are also used to make jelly, syrups, and sauces.



Chokecherries

- Cherry seeds, leaves, and stems can be poisonous since they contain small amounts of cyanide. These parts of the plants are especially toxic to livestock.

Gardening

Like apples, domesticated cherries will not grow “true to type” if grown by seed. If you plant your favorite sweet cherry pit, the cherries on the tree will not be the same variety as the cherry you ate, and likely will not taste very good. Nurseries “graft” new trees to grow fruit of a desired variety by attaching a branch of the desired variety to a rootstock to produce a new tree. Sweet cherry varieties are typically not hardy enough for most of Montana, therefore are mostly limited to the Flathead Lake region. Due to fruit flies and other pests, sweet cherry trees may need significant management. Contact your local Extension office regarding regulations and recommendations prior to planting sweet cherries.

Certain varieties of tart cherry trees can be grown in zones three and above, making them suitable for growing in most of Montana. Plant trees in a sunny area. Avoid planting in depressions or hollows where cold air can settle. Fruit trees need to be pruned in the spring.

After planting, cherry trees can bear fruit within 2-3 years. Sweet and tart cherries are harvested in mid-July to mid-August, depending on the variety and weather.

Chokecherries can be grown by a variety of methods including by seed, rhizome cuttings, and grafting. Dormant plants should be planted in early spring or late fall at least six feet apart. Proper pruning is important to promote branching and fruit production. Chokecherry bushes and other bush cherries should produce fruit 2-4 years after planting. Mature bushes produce about 30 pounds of fruit each year.

For more information about growing and caring for cherry bushes and trees, visit <https://www.msuextension.org/> for MontGuides and resources or contact your Extension office.

Selection

Cherries do not ripen after picking, so they are harvested when ripe. Choose ripe cherries that are firm, glossy, and vibrantly colored. Avoid soft, bruised, or wrinkled cherries. Wash cherries prior to eating or using in a recipe.

Storage

While cherries can be stored at room temperature, storing in the refrigerator in a perforated or open plastic bag will extend their shelf life. Cherries absorb surrounding odors, so store cherries away from strong-smelling foods. Cherries can be frozen or dried for enjoying later. Frozen cherries can be cooked or used in baked goods. Keep dried cherries in an airtight container in a cool, dry place for up to one year. Pit cherries prior to freezing, drying, or cooking.

Cooking

Pit. Cut the cherry in half and scoop out pit with finger or spoon and discard the pit. A cherry pitter is a kitchen gadget that will make the process easier.

Fresh. Rinse, dry, and remove the pits to enjoy cherries as is, or slice in halves or quarters to serve in a fruit or green salad, salsa, yogurt, or granola. Mix into a smoothie for an added sweet and sour flavor and red color.

Frozen. Arrange a single layer of cleaned and pitted cherries on a tray and put into the freezer. Once frozen, store in an air tight container or freezer bag. Enjoy this juicy, cool treat on a warm day, or add to smoothies and baked goods.

Baked. Add pitted cherries to pies, muffins, or breads. Roast a single layer of pitted cherries sprinkled with sugar to make baked cherry topping or combine with poultry, game, or pork for a sweet and tart addition.

Dried. Place whole pitted or halved cherries on a tray and dehydrate at 125-135°F for approximately 12-24 hours.

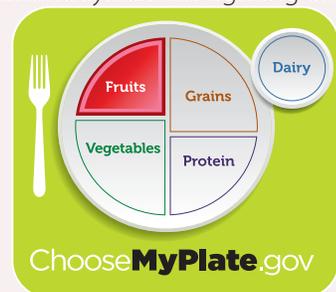
Season. Enhance the flavor of cherries with cinnamon,

black pepper, vanilla, sage, basil, mint, or thyme.

Preserve. For information on preserving sweet cherries, tart cherries, or chokecherries as a jelly or syrup, look for Extension MontGuides on: Making Jams, Jellies, and Syrups including with wild Montana berries and fruit. Visit <https://www.msuextension.org/> and click on the food preservation link or contact your Extension Office.

Nutrition Information

All cherry varieties are packed with flavor and nutrients. One cup of sweet cherries, tart cherries, or chokecherries provides a good source of vitamin C. Unlike many animals, human bodies do not produce this important vitamin. Vitamin C helps build a strong immune system for fighting off disease and infection. It also helps the body absorb iron from plant-based sources. It is one more reason to eat your cherries! Tart cherries are also loaded with vitamin A, which is important for vision and helps with many other functions in the body.



Activities

Fruit Fractions

Source: Adapted from Lesson This!

(<http://www.lessonthis.com/math/fraction-fruit/>)

Grades

3-4

Objectives

Students will:

- Explore and develop an understanding of fractions as numbers (CC.2.1.3)
- Demonstrate that when a whole or set is partitioned into y equal parts, the fraction $1/y$ represents 1 part of the whole and/or fraction x/y represents x equal parts of the whole
- Taste fruits

Supplies

- Washed fruit: 10 cherries to demonstrate parts of a set, 1-2 apples (or more, depending on class size) to demonstrate wholes, and a set of cherries for each group of 4-5 students for practice. Include additional fruits as desired to provide variety.
- Knife
- Plates for fruit
- Cutting board
- White board or chart paper and marker
- MyPlate Food Groups image: www.choosemyplate.gov
- Math journals and pencil

Directions

- Have all students wash their hands with soap and water. Invite students to sit in a circle on the floor. Have all supplies at the learning circle.
- Show students a MyPlate poster or icon. Ask: *What food group are these cherries and apples from?* (Fruit). *What are the other food groups?* (Vegetables, Protein, Grains, Dairy).
- Explain: *Today we're going to eat fractions.* Show the students the whole fruits. Tell them: *We are going to cut them up into pieces and taste them to learn about fractions.*
- Ask: *What is a fraction?* (A fraction can be part of a whole, like part of the apple. A fraction can also be part of a set, like part of the bunch of grapes, part of the group of cherries, or beads on a necklace). Write on the board: *Fractions: part of a whole or part of a set.*
- The apples demonstrate a whole, while the cherries demonstrate a set. Begin by ensuring students understand the apple is the WHOLE and the cherries are the SET.

- Use the apple to demonstrate fractions of a WHOLE. Write on the board: *apple=1*. Tell students this red apple is one WHOLE red apple. Cut the red apple in half. Ask: *How many pieces there are now?* (2) Explain and write: Two halves equal one whole " $2/2 = 1$ ". Ask: *If I eat one piece of apple (put it behind your back), what fraction do we have left?* ($1/2$) You have one of two pieces, pointing to the parts of the fraction $1/2$ that you have just written. Explain that the bottom number (denominator) tells the number of pieces that the apple (the whole) has been cut into and the top number (numerator), tells them the number of parts of the whole. Write: *numerator/denominator*. Bring the other half of the apple back. Show that now you have two pieces again. Each piece is $1/2$. Two halves equal one whole. Write: $1/2 + 1/2 = 2/2$ or *1 whole*. Cut the halves of the apple in half to show quarters, then cut the quarters in half to show eighths, repeating the demonstration. Once students grasp the conversion of wholes to fractions, practice adding and subtracting pieces of the apple and determining the correct numerator and denominator. Optional: repeat cutting second apple into eighths and to check for comprehension.
- Next use the cherries to demonstrate parts of a SET. Say: *The cherries are part of a set. Count how many cherries there are.* (10 or however many you have). Begin by reviewing that one cherry is $1/10$ and two cherries is $2/10$. Pass out different numbers of cherries to volunteers to review the fraction of cherries remaining.
- Next, give each group of 4-5 students a set of cherries. Write a fraction on the board and have students practice manipulating their cherries to match the fraction. For each fraction, have students write the fraction and draw the entire set of cherries and shade in the appropriate number to represent the fraction in their math notebook. Move around the room to assess for comprehension and continue practicing until students have grasped the concept.
- Hand out tastes of both fruits to the students.



Recipes

Cherry and Yogurt Parfait

Developed by: What's Cooking USDA Mixing Bowl, USDA

Servings

6

Ingredients

- 3/4 cup Granola, whole grain rich
- 3 cups Fresh cherries, pitted and whole, sliced, or chopped
- 3 cups Plain yogurt, low-fat
- 1/2 tsp Vanilla extract
- 1 Tbsp Honey

Preparation

1. Set out desired number of cups (about 9 oz each) on work space.
2. Place 1/2 cup cherries in each cup.
3. Combine yogurt, vanilla, and honey in a large bowl. Stir well.
4. Portion 1/2 cup (about 4 oz) yogurt mixture on top of cherries.
5. Sprinkle granola on top of yogurt, portioned evenly between desired number of cups/servings.
6. Serve immediately.



Red, White, and Blue Salad

Source: Northwest Cherry Growers

Servings

6

Ingredients

- 1 1/2 cups Fresh sweet cherries, pitted
- 1 1/2 cups Rainier cherries, pitted
- 1 1/2 cups White peach, large, pitted, and cubed
- 1 1/2 cups Fresh blueberries

Minted Honey Lemon Dressing

- 3 Tbsp Fresh lemon juice
- 1 1/2 Tbsp Honey
- 1 1/2 Tbsp Olive oil
- 1 Tbsp Fresh mint, chopped
- 1/4 tsp Salt

Preparation

1. Toss cherries, peaches, and blueberries in a bowl.
2. In a separate bowl, combine lemon dressing ingredients (lemon, honey, olive oil, mint, salt) and whisk well.
3. Drizzle dressing over fruit and toss gently.
4. Serve Immediately.

Dig Deeper

For sources and photo credits along with more recipes, lessons, quick activities, resources, and guides, visit: mtharvestofthemoth.org.

Book Nook

How to Make a Cherry Pie and See the U.S.A., by Marjorie Priceman

Cherries and Cherry Pits, by Vera B Williams

5 Cherries, by Vittoria Facchini

Hidden Cherries, by Anne Margaret Lewis



4 Montana Harvest of the Month: Cherries



The Montana Harvest of the Month program showcases Montana grown foods in Montana communities. This program is a collaboration between Montana Farm to School, Office of Public Instruction, Montana Team Nutrition Program, National Center for Appropriate Technology, Montana State University Extension, Gallatin Valley Farm to School, FoodCorps Montana, and Montana Department of Agriculture. More information and resources are available at: mtharvestofthemoth.org.

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