Plums

HOW IT’S GROWN

Plums are a “stone fruit,” which are fruits that have a pit on the inside. Similar to other stone fruits (e.g., peaches, nectarines, apricots, cherries) and apples, plums grow on trees. In the spring, plum trees grow small white flowers. After the flowers are pollinated by bees, the fruit begins to grow. Plums grow best when there is not too much rain during the time it is making fruit. In Washington, farmers start picking plums in the beginning of August and ending in late September. After the plums are picked, the trees need to rest and “chill” for the winter in cooler weather, around 45 degrees F.

Sources:

DID YOU KNOW?

• Though California grows most of our country’s plums, you can see hundreds of plum trees when you walk around Seattle.
• In 2007 there were approximately 420 farms in Washington that grew plums.
• Most of the plums grown in Washington are dried and sold as prunes (dried plums).
• In 2007, Washington produced 38.5 percent of the nation’s plums and prunes.
• One plum tree can grow 300 pounds of plums in a year!

Source:
USDA Census of Agriculture and National Agricultural Statistics Service

BOTANICAL FACTS

Family: Rosaceae | Genus: Prunus
Species: P. domestica (European) or P. salicina (Japanese)

Like the cherry, apricot, and peach, a plum is a “stone fruit.” It is called this because it has the hard pit on its inside. Another word for this kind of fruit is “drupe.” While peaches have fuzzy skin, plums have smooth skin and a groove running down one side.

Even though many plums we eat are purple, they can also be red, yellow, green, or almost black! Another difference between plum varieties is that some are “clingstone,” which means that the fruit we eat sticks to the pit. Other plums varieties are called “freestone,” which means that the fruit we eat pulls away from the pit easily.
SCHOOL GARDEN

FOCUS: WEEDING

When is a plant a weed? Any plant can be a weed, because we call something a “weed” when it is growing in a place we don’t want it to grow. Even grass can be a weed if it is growing in the school garden instead of on the lawn. Because you’re just coming back to school, there are probably parts of your school garden that have grown some weeds. Weeds can be a problem because they compete with the plants you are trying to grow—they want to steal away all of the space, nutrients, and water in the soil, and they want to reach up high to get the most light. They’re just doing their best to survive! However, this means it is harder, and sometimes impossible, for your fruits and vegetables to grow.

With your class, first point out which plants you want to leave in the garden (like your seedlings), and which are weeds. What do they look like? Show them how to pull out weeds by pinching the base and pulling up the whole plant with all of the roots. (Otherwise it will just keep growing back!) Then have students spend 10 minutes pulling out weeds in different areas of the garden. Get together and discuss the different kinds of weeds they found. Discuss what other things you could do to prevent weeds from growing back, like mulching, scraping the weeds with a hoe, or turning them under the soil with a small shovel.

Inspired by California Harvest of the Month’s “Berries” Educator Newsletter. For more information, see:
http://www.kidsgardening.com/Dig/DigDetail.paf?ID=1906&Type=Art

JUST THE FACTS

• There are more than 140 kinds of plums sold in this country!
• Most plums are yellow or red on the inside, but the skin can be red, yellow, purple, and even green!
• Plums are best to eat in the summer and early fall, right after they are picked from the trees.
• Plum trees first came to the United States from Japan around 1870.
• Plums originated in China more than 4,000 years ago.
• Dried plums are also called “prunes.”
• To try something new, grab a pluot, which is a sweet and juicy cross between a plum and an apricot.
• http://www.cachampionsforchange.net/en/docs/produce-quick-tips/Plums.pdf
• http://www.fruitsandveggiesmorematters.org/?page_id=190

STUDENT SLEUTH

1. Purple and blue fruits and vegetables contain phytochemicals like anthocyanins and phenolics, which help our bodies do important things like having good memory, lower cholesterol, and healthy urinary tracts. How many purple and blue fruits and vegetables can you think of? Compare them to the answer list. Are there some that you have never heard of? Research them to learn what they look like, or have a classroom tasting of lesson common blue and purple items.

Possible answers: Black currants, black salsify, blackberries, blueberries, dried plums, eggplant, elderberries, grapes, plums, pomegranates, prunes, purple Belgian endive, purple potatoes, purple asparagus, purple cabbage, purple carrots, (purple) figs, purple peppers, raisins.

2. A pluot is a cross between a plum and an apricot (about 75% plum heritage and 25% apricot heritage). What fruit trees do you think are crossed to get a plumcot? How about an aprium? See if you can tell by breaking up the sound of the words.

Answer: They’re all from the same fruit, but different amounts of each fruit are crossed. Plumcots are 50% plum and 50% apricot. Apriums are 75% apricot and 25% plum.

Source: http://www.harvestofthemonth.com/download/Summer/Plums/Plums_Edu.pdf

3. Do some research about plums. Read the paragraphs at this website (http://www.fruitsandveggiesmatter.gov/month/plum.html) and answer these questions:

What plum is a small, tart variety? (Damson)
Which kind of plums are usually smaller, European or Japanese? (European)
Name two very popular kinds of plums. (Santa Rosa and Red Beaut)
What should you always do before eating plums or any fruit? (Wash it)
Which plums come first each year, European or Japanese? (Japanese)
What plum is large, red, and great for cooking? (Elephant Heart)
**ADVENTUROUS ACTIVITIES**

**SCIENCE**

Learn about the parts of the plum and its stone fruit relatives. Included in this packet is a student worksheet on stone fruit plant parts. Give students a handout and read the descriptions of the parts of the fruit, including the stem end, shoulders, pit, cheek, flesh, suture, and tip. Have students listen to the descriptions and then label the appropriate part of the fruit. For younger grades, draw a large pictorial in front of the class and do the activity together.

- **Shoulders (A):** The bulge around the stem cavity at the top of the fruit; it becomes full and rounded as the fruit matures.
- **Suture (B):** The line running from the stem to the blossom end of the fruit.
- **Cheek (C):** The sides of the fruit on either side of the suture.
- **Blossom End or Tip (D):** The end opposite the stem.
- **Stem End (E):** The end at which fruit was attached to the tree. The depression around the stem is called the stem cavity.
- **Pit or Stone (F):** The pit supports the fruit as it hangs from the stem and provides the pathway for nutrients flowing from the tree as the fruit grows.
- **Flesh (G):** The edible portion of a peach or nectarine.

Adapted from California Harvest of the Month’s “Student Sleuth” activities.

**MATH**

First, teach students about Venn diagrams. Bring in plums, peaches, apricots, pluots, and/or cherries. Without eating, observe the similarities and differences between these fruits, both whole and cut. Make large, class-size Venn diagrams that compare and contrast the characteristics between any two fruits. For example, a plum and a peach both have a groove, but an Italian plum might be more of an oval while the peach is round. The plum skin is smooth while the peach skin is fuzzy. Perhaps the both have orange flesh inside as well as similar pits. Do they have more in common or more differences?

Next, conduct a tasting of these fruits. Have students choose their favorite, and make a large bar-graph that displays the class results. Which bar is the tallest? Have students do other calculations with these numbers, like percentages and pie graphs.
**STUDENT ADVOCATES**

There is a lot of fruit growing all over Seattle. Sometimes people pick the fruit and eat it, but other times it falls on the ground and rots. That’s because even one tree can grow a lot of fruit in a year. Ask students if they have seen fruit trees like plums, cherries, apples, pears, or figs near where they live. Do students have families, neighbors, or friends that don’t know what to do with all of the plums or other fruit growing in their yards? Ask students to brainstorm what they could do instead of watching the fruit rot. A number of programs in Seattle, including Community Harvest of Southwest Seattle, City Fruit, and Solid Ground’s Community Fruit Tree Harvest will send volunteers all over the city to pick the fruit and donate it to food banks. Request flyers from these programs and send them home with students to share with their families, relatives, or friends.

For more information:
City Fruit: http://cityfruit.org/
Community Fruit Tree Harvest: http://www.solid-ground.org/programs/nutrition/fruittree/pages/default.aspx
Community Harvest of Southwest Seattle: http://www.gleanit.org/

**GOOD NUTRITION**

- Plums are a good source of Vitamin C, which heals our cuts and bruises and keeps our gums and teeth healthy.
- Dried and fresh plums also contain Vitamin A, which is good for our eyes and skin.
- Purple fruits and vegetables can help improve your memory.
- Blue and purple fruits and vegetables can protect against cancer.

Find out more about nutrients in fruits and veggies:
http://www.fruitsandveggiemorematters.org/?page_id=53