



Harvest Objectives

Students will describe the outside and inside of a pomegranate.
Students will identify that pomegranates grow on trees and have seeds inside.
Students will taste a pomegranate seed.



Harvest Vocab

Outside Inside Firm Fruit Smooth Tree

Materials & Prep

5-7 Pomegranates (one of these may be used for the tasting)
Chalkboard/Whiteboard and chalk/whiteboard markers
Images (included at end of learning plan)
Knife & Cutting Board
Taste Test Chart
Stickers (or small Post-It Notes)
Taste Test Extension supplies (optional)

Literature Connections

Eating the Alphabet: Fruits & Vegetables from A to Z by Lois Ehlert
A Fruit Is a Suitcase for Seeds by Jean Richards
King Pom and the Fox by Jessica Souhami

Warm Up

- In order to engage the children and activate prior knowledge, for 1 – 3 days set a table aside for a Pomegranate Discovery Lab. On the table place scientific tools such as measuring tapes/rulers, string of different lengths (for measuring), a scale, magnifying glasses, tub of water, etc. Add the pomegranates. Before free play begins review the different activities with the students and how they should use the equipment. Then during free play encourage the children to explore the pomegranate and scientific equipment. Here are some possibilities:
 - How heavy is a pomegranate? Put the pomegranate on one side of the scale and see how many items are needed on the other side to balance the scale.
 - Do pomegranates sink or float? Put the pomegranate in a tub of water. Watch what happens. Put other classroom items in the tub. Which do the same as the pomegranate?
 - How wide are pomegranates? Trace around a pomegranate on a piece of paper. How many fingers can fit inside the traced pomegranate? Take a piece of string and measure from one side of the pomegranate to the other. Cut the string and tape it onto the piece of paper. Use a ruler, or unifix blocks, to estimate width.
 - Can you make a pomegranate pattern? Using other items around, make a pattern. Pomegranate, paper, pomegranate, paper; or pomegranate, pomegranate, pencil, pomegranate, pomegranate, pencil.



- One day, cut some of the pomegranate open. Allow the children to explore the seeds and observe them as they dry.
- Add paper, pencils and crayons to the station for children to draw their observations. Teachers can write down the child's observations on each child's paper, or collectively on one large paper.

Explain

- After children have explored the pomegranate, gather together in a large group. Share with the children the word pomegranate. Cut one open and explain that botanically they are fruit (there are seeds inside). What other fruit can they think of? (Apples, oranges, pears, etc.) If possible, put out pictures of fruits and vegetables and allow the children to think about which ones are vegetables.
- Describe how pomegranates grow (on a tree from red flowers) why we should eat pomegranates (healthy eyes, healthy immune system, healthy muscles, and healthy digestion), and for each one come up with an action to help the children 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 pomegranate (it should be brightly colored and shiny). Please see the next pages for images to share with the children.

Taste Test

- Remove seeds for each child to taste. (See step #1 in the Taste Test Extension for an easy way to remove the seeds.)
- Create another chart that says "I Like" with a smiley face and "I Need to Try Again" with a question mark. Give each child a sticker, and ask them to vote by placing it in a column. Count the number of children in each group and write that number in each column.
- Naturally, we all want to say if we like or didn't like the taste. But, research shows it can take up to 15 tastes to get our taste buds and minds to "like" some foods. Children should know that our taste buds change over time, and that sometimes we like a food item better based upon the way it is prepared. To help children keep their minds open to healthy foods consider these responses: "Thumbs up if you like pomegranate right away." "Thumbs up if you need to try again later or try this food prepared another way."
- Review with the children how pomegranates grow and the health 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 children in class using different stations, or ahead of time, and serve it with this lesson, or on a different day to expand the Harvest of the Month experience.

Pomegranate Seed Smoothie (for 20 children)



Preschool In-Class Learning Plan Pomegranate

(adapted from: <http://kblog.lunchboxbunch.com/2010/08/pomegranate-seed-recipes-pinky-sweet.html>)

5 Pomegranates 5 cups seeds—1/4 cup/child

10 bananas—1/2 per child

5 cups strawberries (fresh or frozen)—1/4 cup/child

5 cups vanilla soy milk, or water—1/4 cup/child

Knife & Cutting Board

Bowl filled with water

Strainer

Blender

Cup (1 per participant)



General Directions: Open up pomegranates, remove seeds. Blend ingredients together.

1. Rinse pomegranates under running water so all surfaces have been washed. Cut the pomegranate in half horizontally (between the stem and the bottom.) Then cut off the top and bottom of each half. Next slice between each of the 4 or 5 seed clusters. (for photos see: <http://www.superhealthykids.com/healthy-kids-recipes/how-to-open-a-pomegranate.php>) If using fresh strawberries, rise them under running water to remove any soil.
2. Invite students to wash their hands and come to the table for a cooking activity.
3. Demonstrate how to take the pomegranate seed cluster sections and place them in a bowl of water. Under the water, use your fingers to remove the seeds. The seeds will sink to the bottom and the pomegranate flesh will float at the top. Have each child remove the seeds from one seed cluster section and then pour through the strainer.
4. If using fresh strawberries, show the children how to use their hands to remove the green caps. Have each child remove one strawberry green top. If you prefer, you can slice the strawberry tops off.
5. Have the children measure the ingredients to make batches of the smoothie, depending on blender size. Serve and enjoy, or save for a later snack by writing the child's name on the cup.

How do Pomegranates grow?

After pollination, the pomegranate flower swells to become the pomegranates we eat.



Why should we eat Pomegranates?

Vitamin A



Healthy eyes

Vitamin C



Healthy immune system
(prevents colds, heals cuts)

Potassium & Iron



Healthy
muscles

Fiber



Healthy digestion,
cleans out your system