



Harvest Objectives

Families will identify that beans grow on a plant.
Families will describe and act out the lifecycle of the bean plant.
Families will taste some beans.



Harvest Vocab

Fruit Seed Plant

Materials & Prep

Beans (Dry and at least two varieties of cooked beans)
1 Set Bean Life Cycle full page large cards (see separate document)
1 Sets per child Bean Life Cycle small cards (see separate document; set to print 4 pages per sheet and then cut each sheet into quarters for small cards)
Images (included at end of learning plan)
Taste Test Chart
Stickers (or small Post-It Notes)

Literature Connections

One Bean by Anne Rockwell
The Life Cycle of a Bean (Plant Life Cycles) by Linda Tagliaferro
From Seed to Plant by Gail Gibbons

Warm Up

- In order to engage the family and activate prior knowledge, show them the beans and pass them around so everyone gets to hold and/or touch them. Do not tell them what they are. Tell them to think of the name for the food, but to keep their answer inside their head. Then when everyone has held the beans, ask them, “What are these called?” Consider having everyone say the answer aloud on the count of three, this way you will know who in the family knows. Then discuss, have ever seen one before? Eaten one before? How was it prepared? Where do they think beans come from? How do they grow? (On trees, bushes?)
- In order for the family to explore more about the bean life cycle, have a common experience, and think about what they know, they can put the bean life cycle cards in order together. Using the small cards, tell them that they get to put the cards representing the bean plant life cycle in order, starting with the seed planted in the soil. Allow one or two minutes for them to work and discuss. Then ask them, “Why do they think one piece goes before, or after, another? How do they know?”
- It is okay if the order is incorrect. Have the children leave the cards in the order they think is best and continue as a large group (below.) Then the children will be able to go back and fix their own mistakes.
- Note: For very young preschool students, have them work independently with an adult, perhaps during small group time, give them only the first two pieces and ask them to put them in order. Then give them the next two, to add on, etc. Alternatively, you could put out



the large cards in order first, discussing each briefly. Then the young preschool child could be given the small cards to match the order with the larger cards.

Explain

- As a family, using the bean plant life cycle cards, discuss the correct card sequence.
- Then to review, have the family act out the entire plant life cycle.
 - Seed—children crouch down into a ball, arms wrapped around knees
 - Germination—legs act as roots and they are slightly stooped over
 - Leaf Growth—stand taller and have their arms act as leaves
 - Flower Growth—their face is the flower and their arms wrap around their face
 - Pollination—one hand turns into a bee, touches their nose, and then respectfully touches a friend's nose
 - Immature Bean Seed Pods—extend the arms from the nose just a little bit to be a small seed pod
 - Beans—extend the arms from the nose entirely to be a big seed pod
 - Seed Dispersal—bean pods fall to the ground, or is eaten by a student for lunch
- Have the children go back to their small cards and make any corrections in the order. For children that need the reinforcement, ask them, “Why do they think one piece goes before, or after, another? How do they know?”
- As a family, discuss the word “fruit” and explain that plant scientists consider a bean pod to be a fruit because there are seeds inside, but that chefs consider bean pods to be vegetables. Explain the words “seed” and “plant”, if needed.
- Explain why we should eat beans (healthy muscles, healthy blood, and healthy digestion) and for each example come up with an action to help the family remember. For example, for healthy muscles they can flex their muscles while saying “healthy muscles.” Also explain how to pick good beans (they should be smooth, firm, and unbroken.) Please see the next pages for images to share with the family.

Taste Test

- Give each family member two different beans to taste.
- Create a chart that says “I Like” with a smiley face and “I Don’t Like” with a sad face. Give each family member a sticker, and ask them to vote by placing it in a column. Count the number of people that like, and don’t like beans, and write that number in each column.
- Review with the family how the beans grow and the health benefits.

Toddler Tasting

- To make bean baby food puree, consider using lentils, as they cook quickly. Thoroughly rinse lentils under running water in a colander. After rinsing place in a pot with twice the amount of water. Then cook until soft, for about 20-30 minutes. Then strain out water and mash with a fork, until desired texture. Allow to cool and enjoy!

Taste Test Extension



Preschool Home Visit Learning Plan
Dry Beans

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 the family having each member help in an age-appropriate manner.

Create Your Own 3-Bean Salad (for about 4 servings)

8 oz of 3 different types of beans cooked and cooled, or from cans

Colander

Can opener

Serving Bowls & Spoons

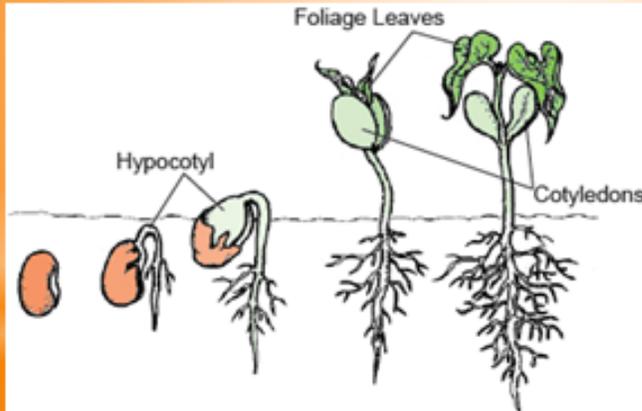
Measuring spoons

Wheat Crackers (2 per person)

Plate (1 per person)

1. All family members should wash their hands.
 - a. Wet hands with warm water
 - b. Apply hand wash (soap)
 - c. Lather and wash for AT LEAST 15 seconds (the length of the ABC song)
 - d. Rinse both sides of hands with water all the way up to the wrists
 - e. Dry hands and shut off faucet with towel
2. If using canned beans, have an adult open the cans, drain and rinse beans in colander, and place in serving bowls. If using home cooked beans, place in serving bowls.
3. Have each family member choose three different bean types. Demonstrate how to measure 1 teaspoon, and have each family member measure 1 teaspoon of the three different bean types onto a plate.
4. Have them mix their bean salad and serve it on top of a wheat cracker. Enjoy!

How do Dry Beans grow?



Beans grow on a plant.
After pollination, the bean flowers swell
into the bean pods we eat.

Why should we eat
Dry Beans?

Potassium
& Iron



Healthy muscles

Folate



Healthy blood

Fiber



Healthy digestion, cleans your system