



Preschool Home-Visit Learning Plan Green Beans

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 a green bean.



Harvest Vocab

Fruit Seed Plant

Materials & Prep

Green Beans (at least one small piece for everyone to taste)
2 Sets Bean Life Cycle full page large cards (see separate document)
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 group 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, tell them they get to work together to put the bean life cycle in order.
- Using one set of 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 check-in with some family. 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 family leave the cards in the order they think is best and continue on. Then the family 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.

Explain



Preschool Home-Visit Learning Plan Green Beans

- Using the large life cycle cards, discuss the correct card sequence.
- Then to review, have the family act out the entire plant life cycle.
 - Seed—family 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 family go back to their small cards and make any corrections in the order. For anyone that needs the reinforcement, ask them, “Why do they think one piece goes before, or after, another? How do they know?”
- As a family, if there is interest, 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 everyone a piece of bean to taste.
- Create a chart that says “I Like” with a smiley face and “I Don’t Like” with a sad face. Give everyone 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

Clean & snap green beans (Skip if using frozen.) Steam until tender. Place into blender/food processor to puree. Use a sieve if needed to get rid of the hulls. Add water as necessary to achieve a smooth, thin consistency. If using frozen, cook frozen green beans (with no salt) according to package directions. Then continue as above. Allow to cool and enjoy!

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



Preschool Home-Visit Learning Plan
Green Beans

For an additional tasting experience, prepare this recipe with children in class using different stations, or ahead of time. Serve it with this lesson, or on a different day to expand the Harvest of the Month experience.

Baked Green Bean Fries (about 4 servings)

13 green beans, ends trimmed
1 tbsp. grated Parmesan cheese
1 egg
Mixing bowls
Plate (one per person)

1/2 cups bread crumbs
pinch of garlic powder
Salt and pepper to taste
Baking sheet and parchment paper

1. All participants 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
1. Heat oven to 425 degrees Fahrenheit. Line a large baking sheet with parchment paper.
2. Have a family member combine, in a mixing bowl, the bread crumbs, parmesan cheese, garlic powder, salt, and pepper.
3. Have a family member crack the egg into another bowl and whisk along with 1 tablespoon water.
4. Demonstrate how to dip the bean in the egg and then in bread crumbs. Then put the bean on the cookie sheet. Have everyone make three green beans.
5. Bake for 15-20 minutes, until tender and golden brown. Allow to cool and serve.

6.

How do green beans grow?

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



Why should we eat green beans?

Vitamin A



Healthy eyes

Vitamin C



Healthy immune system (heals cuts, prevents colds)

Manganese



Healthy bones

Folate



Healthy blood

Fiber



Healthy digestion
cleans out your system