

# HERE WE GROW AGAIN

**Grade Level:** Kindergarten

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**Length of Unit:** Eleven Lessons and a Culminating Activity (Twelve Days)

## I. ABSTRACT

This unit will allow students to actively explore plant growth. The unit encompasses many activities centered around the parts of plants; the stages of plant growth; humans as consumers of plants; plants making their own food and the kinds of plants. Various genres of literature are used to enhance the key concepts of this unit. The combination of scientific exploration, center-based activities, cooperative learning groups, and essential literature creates a unit designed to promote learning. This is an ideal unit for spring when plants are beginning to bloom.

## II. OVERVIEW

- A. Concept Objectives
  - 1. Students will sequence the plant growth cycle
  - 2. Students will gain an understanding of how plants make their own food.
  - 3. Students will categorize plants by their type.
- B. Specific Content from Core Knowledge Sequence
  - 1. What plants need to grow: sufficient warmth, light, and water.
  - 2. Basic parts of plants: seed, root, stem, branch and leaf
  - 3. Flowers and seeds: seeds as food for plants and animals
- C. Skill Objectives
  - 1. Sequencing
  - 2. Observation
  - 3. Measurement
  - 4. Exploration
  - 5. Graphing
  - 6. Sorting
  - 7. Creative Story Writing
  - 8. Journal Writing
  - 9. Comparing and Contrasting
  - 10. Research and Record

## III. BACKGROUND KNOWLEDGE

- A. For Teachers:
  - 1. Hirsch, Jr. E. D. *What Your Kindergartner Needs To Know*. New York: Dell Publishing Company, 1996 ISBN 0-385-31841-3.
  - 2. Kalman, Bobbie *How A Plant Grows*. Crabtree Publishing Company, 1997 ISBN 0-86505-628-5

## IV. RESOURCES

Berger, Melvin. *From Peanuts to Peanut Butter*  
Bunting, Eve. *Flower Garden*.  
Bunting, Eve. *Sunflower House*.  
California NET Materials. *The Seed Growing Story*.  
Cutting, Brian and Jillian. *Seeds, Seeds, Seeds*.  
Ehlert, Lois. *Planting A Rainbow*.

Goldish, Meish. *How Do Plants Get Food?*  
 Hirsch, Jr. E. D. *What Your Kindergartner Needs To Know*.  
 Kalman, Bobbie. *How A Plant Grows*.  
 Michigan State University. *The Seed Growing Stor*  
 Moore, Helen H. *George Washington Carver*  
 Parker, Ed. *Jack and The Beanstalk*.  
 Sterling, Mary Ellen. *Thematic Unit: Plants*.  
 Stout, Charlene. *Plants Activity Book*.  
<http://www.nuttinbutkids.com/gardening.htm>.  
[http://www.peanutbutterlovers.com/Recipes/blender\\_pb.html](http://www.peanutbutterlovers.com/Recipes/blender_pb.html)

## V. LESSONS

### Lesson One: The Journey of a Seed

#### A. Daily Objectives

1. Concept Objective(s)
  - a. The students will sequence the plant growth cycle.
2. Lesson Content
  - a. Plants need air, water, and sun to grow.
3. Skill Objective(s)
  - a. The students will help create a KWL chart on what they know about plants as a shared writing experience.
  - b. The students will plant seeds and observe daily growth and record their data over time.

#### B. Materials

1. Bean Seeds
2. Cups or Milk Cartons for Each Student
3. Chart Paper
4. Markers
5. Potting soil
6. *The Tiny Seed* by Eric Carl
7. Water
8. Tape Recorder
9. *The Seed Growing Story* recorded on a tape. (Appendix B) Due to copyrighted issues, this appendix has been cut.
10. *What Your Kindergartner Needs to Know* by E. D. Hirsch, Jr., and pages 247 and 250.

#### C. Key Vocabulary

1. Seed-a source of growth
2. Experiment- a test
3. Data-factual information
4. Observe-to watch carefully
5. Record-to put down in writing

#### D. Procedure /Activities

1. Open the lesson by asking the class what they know about plants.
2. List their answers under the “K” column. Next ask the students what they would like to know about plants.
3. List this information under the “W” column.

4. Read *The Tiny Seed* by Eric Carl. Ask students if they learned anything new after listening to the story and record this information under the “L” column.
5. Provide each child with a cup, a few bean seeds, and some soil.
6. Explain the vocabulary terms and use them when giving instructions.
7. Divide the class into three groups: group one, group two and group three. (Each group will place their number under their cup. Water the seeds daily and keep them in the sunlight. When the seeds begin to sprout divide the cups by the group numbers. Group one will water their plants every day and continue to keep them in the sunlight. Group two will also leave their plants in the sunlight but not give them any water. Group three will water their plants and place them in an area of the room that gets little sunlight. Take a sheet of chart paper and divide it in thirds with a heading for each group. Students will check their plants daily and record the data under their group’s column.) Refer to the picture on page 247 of *What Your Kindergartner Needs to Know* as an example of how the seeds should grow.
8. As a closing activity record *The Seed Growing Story* on tape and let the students pretend to be a seed bursting out of the soil.

*E. Assessment/Evaluation*

1. Group participation
2. Observation
3. Questions and Answers

**Lesson Two: A Tree, To be or not To Be**

*A. Daily Objectives*

1. Concept Objective(s)
  - a. The students will identify the two categories of trees.
  - b. The students will name the parts of a tree.
  - c. Plants are all around us.
2. Lesson Content
  - a. A tree is a plant and it has different parts.
  - b. A tree is either deciduous or evergreen.
3. Skill Objective(s)
  - a. The students will distinguish between deciduous and evergreen trees.
  - c. The students will label the parts of a tree.
  - d. The students will create a class big book of things that grow on trees.

*B. Materials*

1. Deciduous Tree or Picture
2. Evergreen Tree or Picture
3. *What Your Kindergartner Needs to Know* by E. D. Hirsch, Jr., pages 244, 245, and 255.

4. *A Tree Is Nice* by Janice May Udry
  5. Picture of a tree with labels
  6. Construction Paper
  7. Markers
  8. Crayons
  9. Chart paper
- C. *Key Vocabulary*
1. Deciduous-a tree that loses its leaves in the fall and grows new leaves in the spring
  2. Evergreen-bushes and trees that stay green all year long, even in the winter
  3. Branches-the plant stems that extend from a tree
  4. Trunk-the main stem of a tree
  5. Roots-the underground part of a plant
  6. Leaves-an outgrowth from a plant stem
- D. *Procedures/Activities*
1. Read *A Tree Is Nice* by Janice May Udry.
  2. Help the students create a web of different things that grow on trees.
  3. The words “Things That Grow on Trees” should be in the center of the web.
  4. Explain that there are two types of trees, deciduous and evergreen, by reading page 255 of *What Your Kindergartner Needs to Know*. Tell the students the characteristics of each tree.
  5. Show the students a picture of a tree with removable velcro labels that name its parts. Refer to pages 244 and 245 of *What Your Kindergartner Needs to Know*.
  6. Explain the vocabulary terms.
  7. Allow students to take turns labeling the parts of the tree.
  8. Next, explain to students that they are going to explore the playground for deciduous and evergreen trees. Once the trees have been located allow the students to observe the difference up close.
  9. While observing the trees also examine their different parts: leaves, branches, trunk, and roots. Try to choose a tree with roots that are very visible.
  10. When students have returned to the classroom give each one a sheet of construction paper, markers and crayons. Ask them to draw their own tree and something growing on it. After the drawings are completed the students will label their tree and what they have growing on it.
  11. Collect all of the student’s pictures to create a class big book.
- E. *Assessment/Evaluation*
1. Students will name and label the parts of a tree.
  2. Students will distinguish an evergreen tree from a deciduous tree.
  3. Students will create their page for the class big book.

### **Lesson Three: Flower Power**

#### **A. *Daily Objectives***

1. Concept Objective(s)
  - a. There are different types of flowers.
  - b. Plants are all around us.
2. Lesson Content
  - a. A flower is a plant that has different parts.
3. Skill Objective(s)
  - a. The students will name the parts of a flower.
  - b. The students will identify various types of flowers.
  - c. The students will create a journal page that discusses their favorite flower.

#### **B. *Materials***

1. Sentence Strips
2. Mary, Mary Quite Contrary Felt Pieces
3. Felt Board
4. Pictures of Flowers (Seed Packages are Perfect)
5. Live flower with roots
6. Markers
7. *Planting A Rainbow* by Lois Ehlert
8. *What Your Kindergartner Needs to Know* by E. D. Hirsch, Jr., page 27
9. Journal Paper
10. Pencils
11. Crayons
12. Chart Stand
13. Flower Garden Song (Appendix A)
14. KWL Chart

#### **C. *Key Vocabulary***

1. Previous Vocabulary (leaves, roots, and seeds)
2. Flower-the colorful part of the plant that bloom and make seeds
3. Stem-the part of the plant that holds up the leaves and flowers. It also helps food to travel through plants.
4. Petals—brightly colored leaves of a flower
5. Stamen-the part of a flower that holds the pollen
6. Pollen – dusty powder that causes seeds to be made
7. Nectar-a sweet liquid inside flowers
8. Pollinators-bees, birds, and bugs that carry pollen
9. Cockleshell-a scallop shell
10. Silver bells-a bell-shaped white flower
11. Daffodil-a plant with trumpet-shaped flowers
12. Tulip-a colorful flower of the lily family
13. Violet-a type of flower that blooms in spring and summer
14. Bloom-to make flowers
15. Petunia-a funnel-shaped flower
16. Sunflower-a large yellow flower that has seeds that can be eaten

- D. *Procedures / Activities*
1. Write the Mary, Mary Quite Contrary nursery rhyme from page 27 of *What Your Kindergartner Needs to Know* out on sentence strips. (Appendix A)
  2. Allow students to recite the nursery rhyme using the felt pieces. Substitute the words cockle shells and silver bells with the names of the other flowers. Make certain that pictures are attached to the flowers and that they are on a different color sentence strip.
  3. Review vocabulary flower names.
  4. Students may take turns putting different pictures and names of flowers on the chart stand and reciting the nursery rhyme.
  5. Discuss the various flowers, their shapes and how they smell.
  6. Next give each child a journal page and the prompt "If I could be a flower, I would be a\_\_\_\_\_. because\_\_\_\_\_". The children will draw a picture of their favorite flower and complete their journal page.
  7. Update the KWL chart and review it.
  8. Conclude the lesson by singing the Flower Garden Song. (Appendix A)
- E. *Evaluation / Assessment*
1. Active Participation
  2. Observation
  3. Completion of Journal Pages

#### **Lesson Four: Trees and Flowers**

- A. *Daily Objective(s)*
1. Concept Objective(s)
    - a. The students will tell if a plant is a tree or a flower.
  2. Lesson Content
    - a. The students will determine that all plants are not the same.
  3. Skill Objective(s)
    - a. The students will compare and contrast a flower to a tree and label their parts.
- B. *Materials*
1. Overhead Projector
  2. Transparencies of a tree and flower that show their parts
  3. Construction Paper
  4. Markers
  5. Sentence strips
  6. *What Your Kindergartner Needs To Know* by E.D. Hirsch, Jr., and Pages 111 and 245.
- C. *Key Vocabulary*
1. Compare-to be equal or alike
  2. Contrast-the difference between two things
  3. Review previous related vocabulary

D. *Procedures/Activities*

1. Review the previous lessons on flowers and trees.
2. Write the saying “Great oaks from little acorns grow”, on sentence strip and discuss it. Ask students what they think it means and then read the explanation on page 111.
3. Call out the names of plants such as oak, rose, redwood, tulips, sunflower, magnolia etc., and let the children determine if the plant is a tree or a flower. If the name is a tree, the children stand tall and hold their arms up like the branches of a tree. If the name is a flower, the children put their fingers to their noses and pretend to smell a sweet flower.
4. Display a picture of a flower on the overhead with its parts labeled. Then display a picture of a tree on the overhead with its parts labeled. The pictures on page 245 of *What Your Kindergartner Needs to Know* are excellent examples.
5. Explain the vocabulary.
6. Examine the two pictures and explain how they compare and contrast.
7. Last, turn the overhead projector off and give each student a sheet of construction paper and instruct them to draw a flower with all its parts on one side and a tree with all its parts on the other side.

E. *Assessment/Evaluation*

1. The students will perform the correct body motion for a plant and for a tree.
2. The students will draw and label the parts of a flower and the parts of a tree with no more than two errors.
3. The students will explain how trees and flowers differ.

**Lesson Five: Sunflower Fun**

A. *Daily Objectives*

1. Concept Objective(s)
  - a. A sunflower is a type of flower that has many seeds.
2. Lesson Content
  - a. Flowers produce seeds.
3. Skill Objective(s)
  - a. The students will estimate the number of sunflower seeds in a jar.
  - b. The students will create a sunflower using construction paper.

B. *Materials*

1. Green, Yellow, and Brown Construction Paper
2. Clear Jar
3. Small Pieces of Paper
4. Pencils
5. *Sunflower House* by Eve Bunting
6. Sunflower seeds

7. *Sunflower* poem (Appendix A)
- C. *Key Vocabulary*
1. Estimate-to guess how much or how many
  2. Sunflower-a large yellow flower that has seeds that are edible
  3. Edible-something that you can eat
- D. *Procedures/Activities*
1. Read *Sunflower House* by Eve Bunting.
  2. Explain the vocabulary words.
  3. Show the students the jar with the sunflower seeds and ask them to estimate how many seeds are in the jar, give each student a small piece of paper to write their answers.
  4. Graph the answers on the chalkboard or a wall.
  5. Count the seeds and let the student who was correct or closest pass out sunflower seed snacks to the class.
  6. Supply each student with yellow, green, and brown construction paper. Direct them to tear a paper sunflower and include all the parts of the flower including the seeds in the middle.
  7. Conclude the lesson by saying the *Sunflower* poem. (Appendix A)

### **Lesson Six: Turning Peanuts into Peanut Butter**

- A. *Daily Objectives*
1. Concept Objective(s)
    - a. Peanuts are a type of plant that grow under the ground.
    - b. Peanuts are the seeds of the peanut plant.
  4. Lesson Content
    - a. Peanut Butter is made from the peanut plant.
    - b. Dr. George Washington Carver invented peanut butter and other products from peanuts.
  3. Skill Objective(s)
    - a. The students will be able to explain the importance of George Washington Carver.
    - b. The students will follow a recipe to make peanut butter.
- B. *Materials*
1. Peanuts in Shells
  2. Magnifying glasses
  3. Celery sticks
  4. Apple wedges
  5. Bread
  6. Crackers
  7. Peanut butter recipe chart (Appendix A)
  8. Napkins
  9. Plastic knives
  10. *From Peanuts to Peanut Butter* by Melvin Berger

11. *What Your Kindergartner Needs To Know*, pages 274 and 275
12. George Washington Carver poem by Helen H. Moore (Appendix C) Due to copyrighted issues, this appendix has been cut.
13. Chart paper
14. Markers
15. 2 cups roasted, shelled peanuts
16. 1 teaspoon peanut oil
17. 1/2 teaspoon salt
18. rubber spatula
19. blender
20. closed container

C. *Key Vocabulary*

1. Graph-putting collected information together in lines
2. Inventor-a person who thinks of something new
3. Scientist-a person who studies plants and nature
4. Magnifying glasses-a special glass that makes things look bigger

D. *Procedures/Activities*

1. Open the lesson by asking the students how many of them like peanut butter. Write the results on chart paper.
2. Ask the students where do we get peanut butter. Explain to the class that peanut butter comes from the peanut plant, which is actually a seed. Refer to page 251 of *What Your Kindergartner Needs to Know*.
3. Show the children peanuts and how they come out of the shells.
4. Explain to them that peanuts grow under ground and that Dr. George Washington Carver was a famous scientist who invented many ways to use peanuts. Read pages 274 and 275 of *What Your Kindergartner Needs to Know*.
5. Explain the vocabulary words.
6. Next, read *From Peanuts to Peanut Butter* by Melvin Berger.
7. Show the class the recipe for peanut butter written on chart paper. (Appendix A)
8. Set up tables for half the class to observe peanuts under magnifying glasses.
9. Allow the other half of the class to follow the recipe (with close supervision), to make peanut butter.
10. When both groups have finished observing and making the recipe, allow the students to taste the peanut butter on the celery sticks, apple wedges, bread and crackers.
11. Assist the students with creating a class graph of their favorite way to eat peanut butter.
12. Discuss the fact that celery, bread, crackers, and apples all come from different parts of plants.
13. Conclude the lesson by saying the George Washington Carver poem.

- E. *Assessment/Evaluation*
1. Group Participation and Cooperation
  2. Observation
  3. As an added center activity peanuts and magnifying glasses will be placed in the science center.

**Lesson Seven: Beans, Beans, Beans**

- A. *Daily Objectives*
1. Concept Objective(s)
    - a. The students will sequence the growth cycle of a bean.
  2. Lesson Content
    - a. Seeds will germinate and become plants.
  3. Skill Objective(s)
    - a. The students will observe and record the growth cycle of a bean as it enters its different stages of growth.
- B. *Materials*
1. Lima Bean Seeds
  2. Paper Towels
  3. Copy paper or Construction paper
  4. Pencils
  5. Date stamp
  6. Ziploc bags
  7. *Jack and the Beanstalk* illustrated by Ed Parker
  8. *Jack and the Beanstalk* felt story pieces
  9. *How A Plant Grows* by Bobbie Kalman
  10. Flip books
  11. Date stamper
- C. *Key Vocabulary*
1. Germinate-to begin to grow
  2. growth cycle-the way a plant grows
  3. seed leaf-the part of a seed that stores its food so that it can grow
  4. shoot-the part of the seed that becomes the stem
  5. Seed coat-the shell that protects the seed
- D. *Procedures/Activities*
1. Review lesson one and the stages of plant growth. Read *Jack and the Beanstalk* using the felt story pieces. Discuss the beginning, middle, and end of the story.
  5. Give each child a lima bean, a Ziploc bag with small holes poked in it, and a paper towel.
  6. Direct students to moisten the paper towel. Demonstrate how to place the bean inside the bag on the moist paper towel.
  7. Read pages 10 and 11 of *How A Plant Grows* by Bobbie Kalman. Explain the key vocabulary terms and show students pictures of the different growth cycles their plants will enter.
  8. Help each child to make a small flip book.

9. They will observe their plants daily. The paper towel must be moistened as often as needed.
10. When they notice any changes, they use the date stamper and a drawing to record their data.
11. Conclude the lesson by predicting how long it will take the seeds to begin germinating.

*E. Assessment/Evaluation*

1. The students record any growth changes in their flip book.
2. Observation

**Lesson Eight: Seeds, Seeds, and More Seeds**

*A. Daily Objectives*

1. Concept Objective(s)
  - a. Seeds grow into plants.
2. Lesson Content
  - a. The students will examine many types of seeds.
3. Skill Objective(s)
  - a. The students will sort and graph seeds.
  - b. The students will match seeds to plants.

*B. Materials*

1. Sentence strips
2. *Little Seed* poem (Appendix A)
3. Variety of Seeds (beans, carrots, tomatoes, watermelon)
4. Pictures of plants
5. Plant word cards
6. Ziploc bags
7. *Seeds, Seeds, Seeds* by Brian and Jillian Cutting
8. *What Your Kindergartner Needs to Know* page 246
9. Chart stand
10. One inch graphing paper (Appendix F)
11. Glue

*C. Key Vocabulary*

1. Previous vocabulary
2. Sort-to put the same kinds of things together

*D. Procedures/Activities*

1. Begin the lesson by reading *Seeds, Seeds, Seeds* by Brian and Jillian Cutting. Also review page 246 of *What Your Kindergartner Needs to Know*.
2. Write the *Little Seed* poem out on sentence strips.
3. Place the sentence strips in a chart stand and read it to the students. Repeat the poem until the students can read it independently. (Appendix A)
4. Attach word cards of familiar garden plants at the bottom of the chart. Include a picture cue and some actual seeds.
5. Provide another set of word cards with seeds for the children to match to the words. Children may self-check their responses using the print and/or the seeds.
6. Give each child a small ziploc bag with a variety of seeds. Direct the students to sort the seeds that are the same.

7. Once they have them sorted they may graph them on the one inch graphing paper.
  8. Conclude the lesson by allowing the students to guess what kinds of seeds they have sorted.
- E. *Assessment/Evaluation*
1. Students will complete a graph.
  2. Group participation

### **Lesson Nine: Food For Thought**

A. *Daily Objectives*

1. Concept Objective(s)
  - a. Plants make the food they need to grow.
2. Lesson Content
  - a. The students will gain an understanding of how plants make their own food.
3. Skill Objective(s)
  - a. Students will observe how food coloring is absorbed into a white carnation and they will draw an illustration to predict the results in their journal.

B. *Materials*

1. *How Do Plants Get Food?* By Meish Goldish
2. *What Your Kindergartner Needs to Know* page 249
3. Measuring cup
4. Long-stemmed white carnation
5. Red and blue food coloring
6. Journal paper
7. Pencil
8. Colored pencils
9. Two glasses
10. KWL Chart

C. *Key Vocabulary*

1. Previous vocabulary (root, stem, and leaves)
2. Photosynthesis-this is how plants make their own food
3. Carnation-a type of flower

D. *Procedure/Activities*

1. Read *How Do Plants Get Food?* By Meish Goldish and page 249 of *What Your Kindergartner Needs to Know*.
2. Review the parts of a plant and discuss how these parts make food for the plant.
3. Examine the carnation with the students and allow them to identify its parts.
4. Begin the experiment by pouring half a cup of water in each glass. Add red food coloring to one glass and blue food coloring to the other until the water is colored darkly.
5. Cut the lower half of the carnation stem in half lengthwise. Put one half in red water, the other in blue. This experiment takes approximately 48 hours.
6. Review the KWL chart and the new knowledge the students have gained.

7. Allow the students to predict in their journals how the carnation will look in a couple of days. The end result should be a carnation that is blue and red.
  8. Conclude the lesson by letting the students share their predictions with the class.
- E. *Assessment/Evaluation*
1. Observation
  2. The students will make a journal entry of their predictions.

### **Lesson Ten: Fruitimania**

- A. *Daily Objectives*
1. Concept Objective(s)
    - a. The students will gain knowledge of the different parts of fruits that are edible.
  2. Lesson Content:
    - a. Fruits grow on trees and vines.
  3. Skill Objective(s)
    - a. The students will become familiar with a variety of fruits and match them with their correct names.
    - b. The students will listen to riddles and select the correct fruit.
    - c. The students will compare and contrast fruit.
- B. *Materials*
1. *What Your Kindergartner Needs to Know* by E. D. Hirsch, Jr., page 252
  2. Fruit Felt Pieces
  3. Fruit name cards with velcro
  4. *The Fruit Bowl* by Dianne Warren and Susan Smith Jones
  5. Construction paper
  6. Grocery advertisements
  7. Felt board
  8. Glue
  9. Scissors
  10. Chart paper
  11. Markers
  12. An apple
  13. A pear
  14. An orange
  15. A tangerine
  16. A peach
  17. A nectarine
- C. *Key Vocabulary*
1. Edible-something that can be eaten
  2. Pulp-the soft part of the fruit
  3. Fruit-a plant that usually has a sweet pulp
  4. Protect-keep safe
  5. Vine-a stem that grows on the ground
  6. Core/Pit-the center of fruit that usually holds the seeds
  7. Peel-the skin or outside of fruit
  8. Apricot-an oval orange-colored fruit
  9. Avocados-a nutty-flavored edible fruit
  10. Berry-a small size pulpy fruit
  11. Date-a fruit that grows on a palm tree

12. Limes-a small yellowish green fruit that is similar to a lemon
13. Mangoes-a tropical fruit
14. Nectarine-a peach with smooth skin
15. Papaya-a long yellow tropical fruit
16. Pear-a fruit that is ripe in the fall
17. Ripe-ready to eat
18. Pineapple-a sweet tropical fruit that grows mainly in Hawaii
19. Raisins-a grape that has been dried in the sun
20. Tangerine-a small orange fruit that is juicy and easy to peel
21. Tropical- a place that always has warm weather
22. Orchard-a group of fruit trees growing together

*D. Procedures/Activities*

1. Create a web by asking students to name all the fruits they know. Write the word "Fruits" in the middle of the web on chart paper.
2. Read and discuss page 252 of *What Your Kindergartner Needs to Know*.
3. Read *The Fruit Bowl* and discuss the variety of fruits that were mentioned in the story. Ask students how many of the fruits have they seen or eaten.
4. Explain the vocabulary terms to the students.
5. Use an apple to demonstrate the parts of an ordinary fruit. Emphasize the fact that certain fruits have parts that are not edible.
6. Discuss how some fruits such as apples, pears, bananas, oranges, and lemons grow on trees. While others such as tomatoes, watermelons, grapes, and pumpkins grow on vines.
7. Give half the class the pieces of fruit cut from velcro. Give the other half the name cards that can be attached to a felt board. Tell the students to listen carefully as you read a riddle. The students holding the fruit felt piece and the name card must attach them to the felt board when they hear the riddle that describes the fruit they are holding. For example, the riddle is "I'm yellow, I grow in bunches, and monkeys love to eat me. What am I?" The student holding the banana and the banana name card will come forward and attach their pieces to the felt board.
8. Let the groups switch so that each one will experience handling the felt pieces and the name cards.
9. Compare and contrast the orange to the tangerine, the pear to the apple, and the nectarine to the peach.
10. Conclude the lesson by instructing students to tear a fruit bowl and glue it onto a sheet of construction. They will each get a grocery advertisement and search it for pictures of fruit. The pictures will be cut out and glued to their fruit bowls.

*E. Assessment/Evaluation*

1. Observation of continued fruit and name matching game in a center.
2. Completion of the fruit bowl constructed by the students.

**Lesson Eleven: Eat Your Veggies!**

*A. Daily Objectives*

1. Concept Objective(s)
  - a. The students will gain knowledge of the different parts of plants that we eat .
  - b. The students will gain knowledge of how some vegetables grow.
2. Lesson Content

- a. Vegetables are plants that come in many shapes, sizes, and colors.
  - b. Potatoes are vegetables that can be used to make other foods.
3. Skill Objective(s)
- a. The students will name the potato as the root of the potato plant.
  - b. The students will graph the favorite way they like to eat their potatoes.

*B. Materials*

- 1. *Oliver's Vegetables* by Vivian French
- 2. *What Your Kindergartner Needs to Know* by E. D. Hirsch, Jr., Page 252
- 3. French fries
- 4. Potato chips
- 5. Mashed potatoes
- 6. Construction paper
- 7. Tape
- 8. Chart paper
- 9. Markers
- 10. Plastic forks
- 11. Ketchup
- 12. Butter
- 13. Paper plates
- 14. Napkins
- 15. Paper potatoes for each child (Appendix E)
- 16. Journal paper

*C. Key Vocabulary*

- 1. Vegetable - a plant that is grown to be eaten
- 2. Garden - an area where plants are grown
- 3. Rhubarb - a type of vegetable that has large leaves
- 4. Beets - a swollen root used as a vegetable
- 5. Previous vocabulary

*D. Procedures/Activities*

- 1. Review the parts of a plant and page 252 of *What Your Kindergartner Needs to Know*.
- 2. Read *Oliver's Vegetables* by Vivian French.
- 3. Discuss the vocabulary terms and the different vegetables in the story.
- 4. Ask the students if the vegetables are leaves, roots or stems. Explain that animals as well as humans eat different parts of plants.
- 5. Ask the students to think of their favorite vegetables and the favorite vegetables of some animals. Remind the students that Oliver's favorite vegetable in the story was potatoes.
- 6. Give each child a small taste of French fries, mashed potatoes, and potato chips. Explain to them that the potato is the root of the potato plant.
- 7. When the students have finished their potato snacks let them write their names on their paper potato. Use the chart paper to graph the favorite way students like to eat their potatoes. (Appendix E)
- 8. Conclude the lesson by letting the children illustrate a journal entry of them eating their favorite potato food.
- 9. Review the unit using the KWL chart and add any new information that has been learned. Discuss all the experiments and activities that were conducted and ask students which was the most fun and interesting.

- E. *Assessment / Evaluation*
1. Student participation in the graph activity.
  2. Students must complete the journal entry.

## VI. CULMINATING ACTIVITY

- A. Invite parents and staff to a “Fruit and Vegetable Bash”. The adults can assist by cutting the fruits and vegetables into bite size snacks. The children will have an opportunity to demonstrate their knowledge of plants and plant growth by explaining the type of plant they are eating and what part of the plant it is. They may also tell how it grows. Skewers are provided so that everyone can make fruit kabobs.
- B. Our cafeteria was gracious enough to provide all of the fruits and vegetables. Parent volunteers donated the other items. A variety of salad dressings were available and participants had an opportunity to make their own delicious salads. Centers were set up around the room and guests had opportunities to do activities such as sorting, graphing, and planting. A designated student was selected as a tour guide to show our guests all of the plant experiments we had conducted.

## VII. HANDOUTS/WORKSHEETS

Appendices A – E [appendices B and C will be available at session only]

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<http://www.nuttinbutkids.com/gardening.htm>

Blender Peanut Butter

[http://www.peanutbutterlovers.com/Recipes/blender\\_pb.html](http://www.peanutbutterlovers.com/Recipes/blender_pb.html)

**APPENDIX A – HERE WE GROW AGAIN**

Flower Garden...

(The Farmer In The Dell)

The farmer plants the seeds

The farmer plants the seeds

Hi, Ho and Cheery O

The farmer plants the seeds.

(Use the following verses)

The sun begins to shine.....

The rain begins to fall.....

The plants begin to grow.....

The flowers smile at us.....

Mary, Mary, Quite Contrary

Mary, Mary, quite contrary

How does your garden grow?

With silver bells, and cockle shells,

And pretty maids all in a row.

Blender Peanut Butter

2 cups roasted shelled peanuts

1 teaspoon peanut oil

1/2 teaspoon salt (omit salt if salted peanuts are used)

Place ingredients in blender. With the lid secured, blend until mixture becomes paste-like or spreadable (6 to 8 minutes). If necessary, stop the machine and use a rubber spatula to scrape mixture from the sides of the container back into contact with the blade. Continue blending until desired consistency is reached.

This mixture should yield 1 cup of creamy peanut butter.

Store in a tightly closed container in the refrigerator. Oil may rise to the top. If this occurs, stir before using.

Little Seed

I'm a little seed in the ground,

Rolled up in a tiny ball.

I'll wait for rain and sunshine.

To make me big and tall.

Sunflower

Sunflower, sunflower, standing straight and tall,

Sunflower, sunflower, you're the tallest of them all!

Sunflower, sunflower, when your seeds fall to the ground,

Sunflower, sunflower, by the squirrels they will be found.

<b>Date</b>	<b>Plant Observations</b>

APPENDIX E - HERE WE GROW AGAIN



