

**Grade** 1 – ESL

**Topic** Observing Seeds

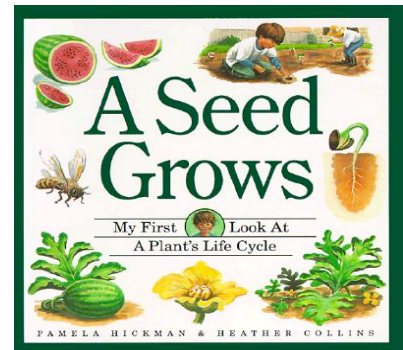
**Title** Where Do Seeds Come From?

**Standards:**

- 1.1.1 Observe, describe, draw, and sort objects carefully to learn about them.
- 1.1.3 Recognize that and demonstrate how people can learn much about plants and animals by observing them closely over a period of time. Recognize also that care must be taken to know the needs of living things and how to provide for them.
- 1.1.4 Use tools, such as rulers and magnifiers, to investigate the world and make observations.
- 1.4.2 Observe and describe that there can be differences, such as size or markings, among the individuals within one kind of plant or animal group.

**Materials:**

- “A Seed Grows” by Pamela Hickman & Heather Collins
- Hand lenses (one per student)
- Different types of seeds (students will need 4 of each seed per student to explore and 1 seed of students’ choice to plant)
  - lima bean
  - corn
  - raw peanut
  - pine cones
  - acorns
- Chart paper
- Science Journal
- Plants, fruits, vegetables fully grown that have seeds:
  - apple
  - lima bean
  - orange
  - cucumber
  - corn
- One sheet of white construction paper per group of 2 students
- Petri dish to hold seeds or paper plates
- Trash bags
- Newspaper
- Baggies



**Objectives:**

Cognitive Domain

Students will observe plants, fruits, vegetables, and seeds.

Students will label their drawings.

Students will identify their seed

Visual Perceptual

Students will sort seeds by an attribute and support their reasoning.

### Psychomotor Domain

Students will demonstrate proper use of a hand lens.

Students will make a technical drawing of the seed they chose to plant for the unit.

## **Procedures:**

Pre-Assessment: Administer pre-assessment.

Introduction: (30 minutes, whole group)

1. Explain to students that we will be starting a unit about plants.
2. Ask students what they know about plants and record student responses on the K section of a K-W-L chart. On the W portion of the chart record any questions students have about plants.
3. Explain that over the next several weeks students will explore plants and work on answering many of their questions.
4. Reading of “A Seed Grows”

Procedure: (Whole group activity-45 minutes)

1. Show the students examples of items that have seeds.
2. Exploration of nearby field or woods
3. Tell the students to explore the woods with a partner to find items that have seeds.
4. Have them collect the items in a small plastic bag.

(Whole group activity-30 minutes)

5. Bring the students back together and have them record their observations by drawing pictures of what they observed and share with the class.
6. After many observations have been listed tell students you will begin this unit by exploring seeds.
7. Hand each pair of students a Petri dish with the seeds they will be using for the unit.

(Partner activity-30 minutes)

8. Encourage students to sort the seeds by shape, size, or color. (Students are encouraged to look at the outside of the seed as well as on the inside.)
9. Students should organize their groups and label each of them.
10. Students will then share with the class how and why they sorted their seeds the way they did
11. Students will then sort their seeds in another way so they are looking at the seed with another perspective.
12. Students can then share with another partner how they sorted their seeds and explain it.

(Individual activity-30 minutes)

13. After the activities listed above, students should pick several seeds that they would like to root and explore over the next several weeks.
14. Students should make a prediction about what type of seed they think they have. At this time the teacher should scaffold what they have based on their earlier investigation of the actual plants, fruits, and vegetables.

15. Through the discussion students will determine what type of seed they have and if it will root.
16. Students will then place the seeds they want to root in a plastic bag with a damp paper towel.
17. In their science journal students should make a technical drawing of their seed and label it with the type of seed it is. We will add to this drawing as we learn more about seeds.
18. Students will then plant their rooted seeds and observe their growth.
19. Administer post assessment

**Assessment:**

- K-W-L chart observations during classroom discussion.
- Anecdotal notes during group investigations.
- See pre-test on next page- use same form for post-test

Name\_\_\_\_\_ Date\_\_\_\_\_

Draw a picture of a seed.

Draw a picture of items that we used to investigate a seed.

Draw a picture that shows where a seed comes from.

Draw a picture of an item that grows from a seed.

## RUBRIC

A. Draw a picture of a seed.

3. Drew a picture of a seed.
2. Drew a picture of something that comes from a seed.
1. Drew a picture of something that is non living.

B. Draw a picture of 3 items that we used with our investigation of our seeds. (ruler, magnifying glass, eyes and noses.)

3. Drew a picture of two items we used to investigate.
2. Drew a picture of one item we used to investigate.
1. Drew a picture of nothing that we used.

C. Draw a picture that shows where a seed comes from.

3. Drew a picture of a living plant.
2. Drew a picture of a part of a seed. (skin/middle)
1. Drew a picture of a non living thing.

D. Draw a picture of a living plant that we have investigated the seed.

3. Drew a picture of a plant that we investigated the seed in our class.
2. Drew a picture of a plant.
1. Drew a picture of a non living thing.