

**Project FOCUS
Best Lessons
FIRST GRADE**

Title of Lesson: Growth of Bean Seeds

Theme: Life Science

Unit Number: 7 **Unit Title:** All About Plants

Performance Standard(s) Covered (enter code):

S1L1

S1CS3

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Plant growth, parts of plants, seeds

Learning Activity (Description in Steps)

Abstract(limit 100 characters): Students will document the growth of a bean seed and identify all its parts.

Details: In small groups, hand out a paper plate with a soaked bean seed, a booklet, and a pencil on it to each student. Have each student write their name on the front of their book.

Show the students how they can peel off the protective coat of the bean and then encourage each student to do the same. If the students find it too difficult to remove the coat without breaking the seed, assist them. When all the seed coats have been removed have the students open the seeds to see the inside. With magnifying glasses, have each student look inside the bean and discuss what they see. Introduce the term embryo to them and discuss what part the embryo plays in the growth of the bean seed. Have each student draw the bean as they see it.

When the students have finished drawing their beans, pass out two paper towels and a clear plastic cup to each student. Have the students ball up the paper towels and place them in the cup. Using the water bottle let each student spray the paper towels inside the cup until they are damp. Then pass out three more beans to each student and let them put the beans in the cup between the paper towel and the side of the cup.

Collect all the materials and save the students' planted beans and their booklets. After a

week, bring the booklets and beans back in for the students to observe. Discuss the changes that they see in the seeds. Have them draw what they see.

Materials Needed (Type and Quantity):

Soaked lima bean seeds

Paper towels

Paper plates

Clear plastic cups

Spray water bottles

“My Bean Growing Book” (booklets made before hand by stapling computer paper together)

Pencils

Colored pencils

Magnifying Glasses

Notes and Tips (suggested changes, alternative methods, cautions):

The bean seeds should be soaked in a large cup overnight before they are given out. A great way to keep the lesson organized is to place the materials for each student on his/her desk before you begin.

Sources/References:

- 1)
- 2)
- 3)