

Seed Snoops

Standards of Learning

Science K.1, K.2, K.4, K.7, 1.1, 1.4, 2.1, 2.4, 3.1, 3.3, 4.1, 4.4

Objective

Students will:

- Compare and contrast seeds that have been soaked in water to those that are dry

Materials

- Wet and dry lima beans, kidney beans, pumpkin seeds, sunflower seeds and corn seeds
- Magnifying glasses
- Paper towel – 1 per student

Background Knowledge

Young children often use their senses as a tool for their learning. In this activity, students have an opportunity to compare dry seeds and soaked seeds. Use large seeds for easier manipulation. The students should be able to see the difference between the two seed coats. One seed coat will be hard, dry and difficult to remove while the other will remain soft, damp and easy to remove. Lead the students to the understanding that the small plant (embryo) inside the soaked seed will have an easier time germinating.

Before beginning the lesson, ask the class several questions to discover their prior knowledge of seeds. A graphic organizer, such as a K-W-L chart, is helpful to record current knowledge. Some sample questions are:

- What is a seed?
- How does a plant grow?
- What grows from a seed?
- What does a seed need to grow into a plant?

Procedure

1. Soak enough seeds of each variety so that each student will have samples.
2. Place a paper towel on each desk.
3. Distribute soaked and dry seeds to students.
4. Have students use the magnifying glasses to inspect the seeds. Students may also want to touch the seeds. (Caution students not to eat the seeds!)
5. On a chart, generate a list of descriptive words and/or characteristics of the seeds.
6. Have students draw simple illustrations of the seeds
7. Ask discovery questions such as these:
 - Which seed changed the most from soaking?
 - Which seeds changed size from soaking?
 - Which seed changed the least from soaking?
 - How would a softer seed coat help the tiny plant inside the seed?

Extension

Create student-generated sentences about the seed activity using the descriptive words.

Research and match what each plant will look like at maturity.

Categorize the seeds by the various characteristics.

Have students write a fictional story about the seeds.

