

Willie and the Beanstalk

Beanie Baby

Science

Materials

Jewelry-sized re-sealable plastic bags (found in craft stores)
Crystal soil (found at most garden centers) – water-holding polymer
Hole punch
Water
Measuring spoons
Soybeans
Yarn
Copies of Student Handout A for each student

Grade Level: K-3

Time: 45 minutes + a couple minutes each day for 7-10 days

Standards:
Life Science

For Kansas standards, visit www.ksde.org

Overview

Soybeans are sometimes called the “magic bean” because they can be used to make many things. Soy products are found in hundreds of items we buy at the grocery store. Students will make their own “beanie baby” necklace so that they are able to watch their soybeans germinate and grow.

Objectives

1. Students will understand the value of the soybean.
2. Students will create a “beanie baby” necklace that will allow them to watch their soybeans germinate and grow.

Background Information

Soybeans are sometimes called the “magic bean” because they can be used to make many things. Soy products are found in hundreds of items we buy at the grocery store. Soy milk, soy flour, textured vegetable protein, and lecithin are all ingredients that come from soybeans and are found in frozen foods, baked items, cake and cookie mixes, candies, cereals, and many other items. Soy ink is used in many magazines and newspapers. Soybeans are an ingredient in biodiesel and dog food as well as lotions, crayons and cooking oil.

Instructional Format

1. Share background information with students.
2. Students will follow procedures to make a Beanie Baby.
3. Upon completing the lesson, students will discuss the activity and observe their soybeans for germination and growth for 7-10 days. They will record observations on Student Handout A.



Beanie Baby

Procedures

1. Punch a hole in the top of a small plastic bag, above the seal.
2. Place 1/4 teaspoon of polymer into the bag.
3. Add one tablespoon of water.
4. Gently push in two soybeans.
5. Seal the bag firmly.
6. Insert the yarn to make a necklace.
7. Encourage students to wear the Beanie Baby around their necks and under their shirts to keep it in a warm, dark place.
8. Check your Beanie Baby each day for germination and record the growth.
9. If you desire, transplant the sprout to a soil-filled cup and continue to watch the growth.

Resources

Steve Connelly, Maryland Agriculture in the Classroom.

To receive a free book – Soybeans an A-Z Book – from the Awesome Agriculture Series, contact Kansas Soybean Commission, 2930 S.W. Wanamaker Drive, Topeka, KS 66614-4116 or www.kansassoybeans.org.

Kansas Foundation for Agriculture in the Classroom. Soybean growth stages pictures. Available at www.ksagclassroom.org

Want More? Extensions

This activity can also be done with other seeds. Try using a variety of seeds and compare germination rates over the same period of time for each seed used.



