

Read & STEAM

My Family's Soybean Farm













Lesson Summary

Students will learn about soybeans through the book *Full of Beans* and a "beanie baby" activity

Grade Level

k-5

Length of Lesson

45 minutes

Materials

- One jewelry sized resealable bag for each student (found in craft stores)
- Crystal Soil (found at most garden centers)
- Hole punch
- Water
- Measuring spoons
- Soybeans (enough for two per student)
- Yarn

Reading Guide

- 1. Introduce the story using these questions (2 min)
 - a. Have you ever seen a soybean?
 - b. What do we use them for?
 - c. "Today we will learn what a soybean is and what we use them for!"
- 2. Read *My Family's Soybean Farm* by Katie Olthoff **(10 min)**
- 3. Reflect on the story with these questions (3 min)
 - a. What is a soybean?
 - b. What are three steps the family took to grow the soybeans?
 - c. What can we make with soybeans?
 - d. "The first stage in the life cycle of a plant is germination, where the sprout begins to grow from the seed. We are going to germinate our very own soybean in a necklace we can wear!"

Vocabulary

Germination: the development of a plant from a seed after a period of dormancy

Crop Scouting: the process of regularly observing and checking crops in a field to monitor their health and growth

Additional Lesson Links

- Matrix lessons
 - Bean Seed Cycle
 - Full of Beans:
 Henry Ford Builds a

 Car
 - Oilseed Crops
- Other Resources
 - Wisconsin Grown + Raised Soybean Poster
 - Soybean STEAM Lesson Plans

Standards

NALO:

T4.3-5.d

T5.K-2.b

T5.K-2.d

T5.3-5.c

T5.3-5.f

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Beanie Babies

- 1. Begin Beanie Baby activity (25 min)
 - a. Punch a hole in the top of your bag (above the seal)
 - b. Place ¼ teaspoon of crystal soil into the bag
 - c. Add one tablespoon of water
 - d. Gently push in two soybeans
 - e. Seal your bag firmly
 - f. Insert the yarn in the hole to make a necklace
 - g. Wear your Beanie Baby around your neck and under your shirt to keep it in a warm, dark place
 - h. Check your Beanie Baby each day for germination
- 2. Review the activity with these questions (5 min)
 - a. What is a soybean?
 - b. What is the first stage in their life cycle?
 - c. What can we make with soybeans?
 - d. "Next time you are driving by a soybean field, think about all of the ways we use soybeans every day!"

**What is Crystal Soil? Crystal soil (a.k.a. soil moist) is water absorbent polymer beads, which can absorb and hold up to 80-150 times of its volume of water for a long period of time. As a reservoir, crystal soil stores water and releases the water whenever the plant needs it. Crystal soil can be used for potted plants, both indoor and outdoor. It is nontoxic, odor free, and environmentally safe. If crystal soil is not available, a cotton ball can be used or jelly marbles.

