

Seed Germination Necklaces

Grade Level(s)

PreK and KG

Estimated Time

30 minutes

Purpose

In this lesson, students will observe corn and soybean seeds as they germinate.

Materials

▪Links:

Website with virtual resources: www.linncoag.com -2020/21 virtual learning drop down tab- March

Book link is on our website: So, you want to grow a taco?

<https://drive.google.com/drive/folders/1BNCgjXJwanJfO9U0vINVVY937AMh32Cz?usp=sharing>

- From Kernel to corn [Kernel to Corn Book - YouTube](#)

Instructional video: [Seed Necklace - YouTube](#)

▪Other:

Corn seeds

Soybean seeds

Yarn

Small bag whole punched

Water beads or cotton balls

Vocabulary

- **Germination** – The process of a plant emerging from a seed and beginning to grow.
- **Embryo** - The part of a seed that develops into a plant.

Interest Approach – Engagement

Show students corn and soybean seeds. Ask them:

- What do they have in common?
- How are they different?
- What do seeds need to grow?

Background - Agricultural Connections

Farmers in Iowa are the country's biggest producers of corn and soybeans. These plants germinate in the ground the same way they do in the seed germination necklaces. Farmers care for them from planting until harvest. Corn and soybeans are found in many items that we use every day, including plastics, corn chips, and even cake! They can also be feed to livestock and made into biofuels.

Procedures

1. Watch the instructional video and listen to the read-aloud story- "So you want to Grow a Taco."
-Seeds germinating are vital to producing food.
2. Place moistened water beads or cotton ball into the hole-punched jewelry sized bag. If using a cotton ball, squeeze out excess water before putting it in the bag.
3. Push one corn and one soybean seed into the bag.
4. Seal the bag and run yarn through the hole to create a necklace.
5. Ask students to wear their bags around their necks or place them in a warm place and observe them every day. Optional: Divide the class into groups to compare different temperature and light conditions (Inside shirt, outside shirt, refrigerator, desk drawer, sunny window, outside, etc.)
6. During the observation period, ask students to record daily journal entries using full sentences and good grammar to describe what they see.
7. If you would like to continue the experiment, transplant the germinated seeds into a cup of soil. Watch them continue to grow and compare the leaves and roots of corn and soybean plants.



Organization Affiliation

Cindy Hall and Kelsey Faivre with Iowa Agriculture Literacy Foundation

Agriculture Literacy Outcomes

Plants and Animals for Food, Fiber & Energy

- Distinguish between renewable and non-renewable resources used in the production of food, feed, fuel, fiber and shelter.
- Explain how the availability of soil nutrients affects plant growth and development.

Agriculture and the Environment

- Explain how the interaction of the sun, soil, water, and weather in plant and animal growth impacts agricultural production.

Science, Technology, Engineering & Math

- Provide examples of science being applied in farming for food, clothing, and shelter products.

Iowa/ Common Core Standards

K-LS1-1. Use observations to describe patterns of what plants and animals need to survive.