

Activity: Cornhusker Necklace

Activity Level: Beginner

PURPOSE

Plant a seed in a mini Ziploc bag and after a few days the necklace will be alive with growing sprouts – baby plants – for students to observe.

EXAMPLE TOPICS IT SUPPLEMENTS

Germination; Observations; Investigations; Plant Life.

ACTIVITY SNAPSHOT

1. Organize and Prepare Supplies
2. Read Background Information
3. Interest Approach
4. Conduct Activity

Discuss the use and importance of corn through an activity. Dunk a cotton ball in water, gently push cotton and seed into jewelry bag. Seal the bag firmly and put a piece of yarn through the punched hole to wear the seed like a necklace. The warmth from your body will keep the seed warm enough to start growing! Check on the corn seed several times a day to record germination and the growth.

5. Ask follow-up questions and make the connection to agriculture
 - Why doesn't a farmer use his hands to plant seeds?
 - What is corn used for in Nebraska?
 - What does a seed need to germinate?

STATE STANDARDS IT SUPPORTS

SC.K.7.2.a—Use observations to describe patterns of what plants and animals (including humans) need to survive.
SC 2.7.2.a—Plan and conduct an investigation to determine if plants need sunlight and water to grow. (Assessment is limited to testing one variable at a time.)

MATERIALS

- Corn Seeds
- Water
- Cotton Balls
- [Jewelry Bags](#)
- Hole Punch
- Red Yarn
- Paper Towels
- [Corn A to Z Poster](#)

WHAT'S THE CONNECTION TO AGRICULTURE?

Agriculture Literacy Outcomes

Plants and Animals for Food, Fiber & Energy

- Explain how farmers work with the lifecycle of plants and animals (planting/breeding) to harvest a crop.

VOLUNTEER ENRICHING ACTIVITY

PROCEDURES:

1. Organize and Prepare Supplies

Before the activity, punch a hole in each jewelry bag and cut the yarn to the length of a necklace. When completing the activity each student will need one of each: piece of yarn, jewelry bag, corn seed, and cotton ball. Students can share water bowls to dunk cotton in.

2. Background Information

Seeds are vital to our survival! Without seeds, the plants that provide our food, fuel, fiber, oxygen and many other essential products would not exist. Seeds are the method by which plants reproduce. Each seed has an embryo, also known as a baby plant, with the potential to grow into an entire plant. In order for the seed to **germinate**, or sprout, the seed needs warmth, moisture and oxygen.

Seeds will not germinate until they have the proper environment. For example, in the winter the soil temperature may dip to below 32F, so the seed will not sprout. Once the ground thaws in the spring and the temperature rises to approximately 65F, most seeds will sprout if moisture and oxygen are also available. Most seeds germinate when the temperature is between 65-85F.

Moisture softens the seed's protective outer covering, called the seed coat. The embryo pushes through the softened seed coat and the plant begins to grow. As the seed continues to grow, a root will push into the soil for water and a stem will push up toward the surface for light. This sprouting, or germination process, is somewhat mysterious because a majority of the time it occurs underground where we cannot observe the action. The clear jewelry bag and cotton balls used in this activity provide an opportunity to get a good view of the germination process and the plant's beginning growth and root system.

Seeds and the germination process offer a wide variety of opportunities for scientific investigations and experiments. Some seeds are naturally fast germinators (lettuce, peas, and beans) while other seeds are known as slow sprouters (carrots and parsnips). Working with moisture, amount of light, and growing media as variables, students can design experiments to discover the optimal conditions for fast seed germination.

3. Interest Approach

- Tell students that they will be growing their own corn
- Do you know where corn is grown?
- Who grows corn? When do we plant corn?
 - i. Use this as an opportunity to talk about planters and combines.*
- What is corn used for? (In Nebraska – livestock feed, ethanol, and food products)
- Show Corn A to Z poster to show the uses of corn.

4. Conduct Activity

- a. Remind students they will be farmers for the day as the plant their own corn!
- b. Give each student one necklace, one corn seed and one cotton ball.
- c. Have each student take their cotton ball, dunk it in the water, and then squeeze the water out.
 - Why do you squeeze all of the water out?
Otherwise the seed will drown

VOLUNTEER ENRICHING ACTIVITY

- d. Put the cotton ball into the necklace. Next, put the corn seed in the necklace
 - What does it take for a seed to grow?
Water and Warmth
 - You have given the seed water with the cotton ball; how will you keep the seed warm?
By keeping it close to your body because you are warm
 - e. It takes 2 to 3 days for the seed to germinate; after 5 days the seed will be too big for the bag and the students will need to plant the seed in a pot or in the soil (the seed must keep warm for it to grow.) They will never need to add more water to the bag. Water after the seed is transplanted into a pot.
 - f. Have students tuck the necklace into their shirt to keep them extra warm.
5. Ask Follow-Up Questions and Make the Connection to Agriculture
- A farmer plants millions of seeds each year, why do you think he doesn't use his hands?
Review planter and combine. Corn is planted in the spring and harvested in the fall. It would take a long time.
 - Many farmers in Nebraska grow corn. What do we use corn for?
The main use of corn in Nebraska is to make ethanol – the clean burning fuel for our cars! Livestock are the main consumers of corn in Nebraska. Corn can be used to make food products and daily items we use every day. (Show Corn A to Z poster again)
 - What does a seed need to germinate? How will students keep their seed warm?
Water and Warmth to germinate. Water, Sunlight, Soil, and Nutrients to grow. Keep seed warm by wearing around neck or hanging in window.