

Seed Necklaces

*A lesson from the New Jersey Agricultural Society
Learning Through Gardening program*

Overview: This simple seed-sprouting activity enables your students to watch the entire process of seed germination up close. Students love walking around school all day wearing their scientific seed necklace

Grades: PreK-5

Objective: Students will be able to:
Observe and describe the process of seed germination.

Materials:

easy to germinate seeds such radish seeds
extra-small ziplock bags, one per student, such as those jewelry comes in. They are available on the internet or you can request a donation from a local jeweler. Punch a hole in the top of each ziplock bag, above the zipper.
cotton balls
string or yarn
hole-punch
bowls of water

Procedure: Discuss the meaning of the word germination and the process with your students. What do they think happens first when a seed germinates? How long do they think it will take to see the seed to sprout? Explain to students that you are going to plant seeds in a way that the students will be able to watch the entire germination process.

Divide the students into small groups around a small bowl of water. Ask them to dip one cotton ball into the water and then squeeze it gently to remove excess water.

Press the moist cotton ball into a bowl of seeds using a little force so that the seeds stick to the cotton.

Carefully place the cotton balls and seeds into the middle of the small ziplock bag where they can easily be seen. Students may be concerned if some of the seeds fall off the cotton ball in the process, but as long as there still seeds stuck to the cotton, the experiment will work. Seal the ziplock bag.

Thread string or yarn through the hole at the top of the bag that is long enough to make a necklace for the student. Tie the string and place around the student's neck. Ask the students to write their names in marker on the back of the bag.



Important: Tell students not to open the ziplock bags until the germination process is complete and their plants have leaves. If the bag is opened, the cotton ball will dry out and the seeds will not grow.

Ask the students to record their observations of the germination process every morning in their science journals.

IMPORTANT NOTE: It is a good idea for the teacher to collect all the seed necklaces every afternoon rather than to allow the students to take them home. This way, no necklaces will be forgotten or lost.

After watching the germination process for about 10 days, the students can plant their germinating seeds in small pots in the classroom, or they can take them home to be planted. The cotton ball should be planted right in the soil along with the roots.

Evaluation: Students' observations of the germination process in their journals.

Extension: Ask the students to think about where seeds grow and ask them whether they think it is preferable to wear their necklace outside or inside their shirts. (Seeds are planted in the ground where it is warm and dark.) Or you can do a class experiment – have half the class wear the seed necklaces on the outside of their shirts and half on the inside and compare the seeds' growth.