



A Nutty Life

Objectives:

Students will be able to:

- identify the stages in the peanut lifecycle.
- create a timeline showing peanut growth and development over the course of one year.

National Learning Standards:

Next Generation Science Standards

- 3-LS1-1: Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction and death.
- 5-LS1-1: Support an argument that plants get the materials they need for growth chiefly from air and water.

Activity Description: Students will plant a peanut and discuss the lifecycle of the plant. As a class, students will create a timeline showing the peanut growth process over time.

Materials

- Egg cartons (1 per group of 3-4 students)
- Soil
- Peanut seeds
- Water
- 11x17 sheet of paper (1 per group of 3-4 students)
- Markers, crayons, or colored pencils

Activity Steps

Activity Prep: Set out planting supplies.

Step 1: Split students into groups of three to four.

Step 2: Have each group fill one egg carton with potting soil and get 12 peanut seeds.

Step 3: Instruct students to use their pinkie finger to make a hole for the seed in each compartment of the egg carton. Students should push their finger in until the soil is to the top of their fingernail. Have students place one seed in each hole and cover with soil.

Step 4: Completely saturate each compartment with water.

Step 5: Place in a warm area where light will reach the seeds.

Step 6: Post the following timeline for students to see, using a projector or white board:

1. In the U.S., peanuts are planted after the last frost in April through May.
2. In 10 days, peanut seedlings poke through soil.
3. In 40 days, yellow flowers appear on the plant.
4. Flowers pollinate themselves and the petals fall off. The peanut ovary, called a "peg," begins to form.
5. The peg grows away from the plant and back into the soil. The peg turns into a peanut! The peanut is technically the fruit of the plant.
6. In four to five months, peanuts are harvested.

Step 7: Have groups create a visual timeline on a large (11 x17) sheet of paper. As the peanut plants grow in the classroom, have students note observations on their timelines.

Processing Questions:

1. What is unique about the life cycle of the peanut plant?
 - a. Listen for students to observe that the plant flowers above ground, but the fruit (peanut) grows below ground.
2. What is unique about peanuts compared to other common nuts?
 - a. Listen for observation that most other nuts, like pecans and walnuts, grow on trees.

It's A Fact!

Peanuts belong to a family of plants called legumes. Legumes are amazing because they put nitrogen back into the soil, which helps other plants grow!