

Terrariums

Background Information

Students will be able to observe the water cycle and how different types of seeds germinate and grow.



Materials provided by McLean County Agriculture in the Classroom:

- clear plastic deli container
- 2-3 cups of potting mix
- pinch of grass seeds (at least 10 seeds)
- 3 bush green bean seeds
- 3 corn seeds
- clear packaging tape
- Terrarium Observations Student worksheets
- Water Cycle Ag Mags

You will also need:

- rulers with centimeter markings
- water
- permanent markers

Terrariums

1. Before class, it is helpful to moisten the potting mix. This will save time later.
2. Have each student place 1-2 cups of potting mix in the plastic container.
3. Students can then carefully plant the 3 bush green bean seeds and 3 corn seeds at a depth of 2-3 centimeters. They should be sure to cover the seeds up. It is helpful for students to measure how long 2- 3cm is on their finger first. (For instance, it may reach their first or second knuckle.) Students may want to plant one of each of the seeds next to the side of the container in order to watch the growing process.
4. Each student should sprinkle the grass seeds on the surface. Add just enough potting mix to lightly cover the grass seed. Do not pack down.
5. Close the container and place a piece of clear packaging tape on the front to seal.
6. Using a permanent marker, each student should label the container with his/her name.
7. Place terrariums somewhere in the room where they will not be disturbed but will receive some light. It does not have to be near a window. Most classroom lights are sufficient. The terrariums may not need any additional water over the next 2 weeks since the potting mix was moist and the container is sealed. If no condensation appears on the sides of the container and it appears dry, a small amount of water may be added. If too much moisture is in the container and the sides seem to completely fog up, open temporarily to let some drier air in and some of the moisture evaporate.
8. Students should make careful written observations for a 2-week period on the Terrarium Observation Sheet Student Worksheet. You may even ask them to predict which of the seeds will grow first, second and third. Encourage them to use descriptive words. They may want to draw pictures. They should measure the height of each plant's growth. Using a ruler, students should measure from the outside of the bottle. Measure only the tallest of each type of plant. Measurements should be made from the potting mix surface to the top of the plants. This data could be used on the Plant Growth Graph. Use different colors to chart each species of plant.

Illinois Science Standards MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. MS-ESS2-4. Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.