



CREATE A MINI-GRASSLAND

Observe plant growth.



GRADES 5-7

MATERIALS

For each group:

- small sponge
- plastic container (such as cottage cheese container)
- grass seed
- plastic wrap
- plant mister or spray bottle filled with water

KEY WORDS

- grassland
- grass
- germination
- seeds
- stem
- grazing

STANDARDS

- SCI.7.2.6
- SCI.6.3.1
- SCI.6.3.3
- SCI.6.3.4

OBJECTIVES

- Students will learn how to grow several different types of grasses.
- Students will make detailed observations of grass growth.

PROCEDURE

- Plan to plant as many different types of grasses as you can. Ask the students to help find sources such as a garden center, feed store, or nature center. Buy a packet of seeds for an ornamental grass at a garden center. Collect seeds from the top of wild grasses.
- Plant only one type of grass in each container. Be sure to label each container. Wet each sponge and place it in the dish or tray. Scatter grass seeds thickly and evenly on top of the sponge. Be sure to mist the sponges daily. Cover overnight with some plastic wrap to keep warmth and moisture in. Within a week, students should have a fresh green patch of grass.
- Have students observe the grasses as they grow and encourage them to make comparisons. Note differences in color, coarseness, germination time, growth rate, etc.
- As the plants begin to grow, have students record their observations in logs or journals. Suggest they include descriptions of what they see, feel, and smell. Are they surprised by anything?
- Students can also discover how fast grasses grow by taking measurements daily. Have them choose and mark one shoot and measure it from top to bottom. They can record their findings in both numbers and actual-size drawings. They could graph the results, using increments of 1/8 or 1/4 inch on the vertical axis and spans of 1, 2, 3, or 4 days on the vertical axis.

RECOMMENDED ASSESSMENT

- Assess students based on the detailed observations in their journals, or on the quality of their experimental methods.

EXTENSIONS

- You can't bring African gazelles, zebras, and wildebeest into the classroom, but you can help the students understand why these grazing animals depend on grass for food by having students "mow" their mini-savannahs. When the grass is well-established, have the students cut the grass with scissors, trimming away as much or as little as they wish. Over the next few days, measure and compare the growth of their cut grass. Does it grow back? Explain that grasses grow from the base of the stem, not the tip. That is why grass is not harmed when animals graze on it or people mow it. Also, tell students that each kind of animal on the savannah eats a different part of the grass plant.

