

Soil Sammy

This activity is a good supplement to a lesson on soil and seed germination.

Soil is an important natural resource. Farmers must take good care of the soil so it will continue to grow food. Farmers must check the soil to make sure it has the right nutrients in the right amounts. If the soil doesn't have adequate nutrients, farmers need to adjust the balance of nutrients to grow healthy crops. Farmers may grow crops that add nutrients such as nitrogen to the soil, or they may add fertilizers containing nitrogen and other nutrients.

Materials Needed:

- Knee-high stocking
- Grass seed, 1 tablespoon each
- Potting soil
- Baby food jar
- Water
- Jiggle eyes
- Scissors and fabric
- Glue (quick drying craft glue is best)

Procedure:

1. Using knee-high hose, place some grass seeds in the toe where you want them to grow. The toe end of the hose is the head of Soil Sammy and the grass looks like hair when it grows.
2. Pack a handful of soil in the end of the hose on top of the seeds. Make sure the ball of soil is slightly larger than the opening of the baby food jar.
3. Tie a knot in the hose under the ball of soil.
4. Completely wet the head of the Soil Sammy. Place the top of the hose (which is the bottom of Soil Sammy) in baby food jar filled with water, making sure the head is above the mouth of the jar. The end of the hose will absorb water to feed the grass seed, which will germinate through the hose (you may have to cut a few small holes in the hose to help).
5. Now you can decorate! Suggestions include a round piece of fabric to fit over the mouth of the jar for a shirt, buttons glued to the shirt, jiggle eyes for the face, felt cut-out for the mouth, etc.
6. Water as needed and be sure to cut the grass "hair" and style as desired.

For Discussion:

Will the grass hair grow better or faster with fertilizer? Try it and find out. Add different fertilizers to the soil and water and see which grows best.

Add to the water:

Store-bought liquid fertilizer
Soda pop (it has phosphorus)
Apple juice (it has citric acid)
Lemon scented liquid soap (it has citric acid)
Ammonia (it has nitrogen)

Add to the soil:

Store-bought fertilizer stick
Coffee grounds (caffeine has nitrogen)
Baking soda (it has nitrogen)
Epsom salt (it has magnesium sulfate)
Cream of tartar (it has potassium)

Farmers must be careful to add just the right amount of fertilizer. Too much fertilizer can be harmful, and too little fertilizer can result in plants that don't grow well due to lack of nutrients. Farmers attend special classes and use math problems to figure out the right amount to use. You shouldn't use too much fertilizer either, but you can experiment with different amounts.

Wisconsin Soil Facts:

- In Wisconsin, 16.2 million acres of land is used for agricultural purposes.
- There are 560 different soils mapped in Wisconsin.
- Wisconsin's state soil is Antigo Silt Loam.