

What's Growing on Your Hands?

Begin this activity on a Monday for best results.

Grade Levels Grades 1 and 2

Estimated Teaching Time

- Set-up: 30 to 45 minutes the first day
- Follow-up: 10 minutes each day for four to six days, depending on the temperature and other conditions

Interdisciplinary Connections

- Following a scientific procedure (Science)
- Comprehending requirements for biological life (Science)
- Pictorially recording seed growth (Art)

Objectives

Children will:

- Learn about the process of seed germination.
- Understand that water, light and food are requirements for plant life.
- Understand that dirty or germ-y hands provide a place for germs to grow.

What Children Do

Children will plant fast-sprouting seeds on damp paper towels cut in the shape of a hand to illustrate that germs grow on warm, moist surfaces when water, light and food are present.

Materials Required

- 1 lb. bag of fast-sprouting wheat, grass or radish seeds
- Three rolls of paper towels or thick polyester batting fabric
- Plastic plates or aluminum pie pans, one per child
- Gallon-size plastic bags, one per child
- Spray bottle
- "What's Growing on Your Hands?" activity sheet ([blackline master 1.3 \(PDF\)](#))
- **Optional** Magnifying glasses

Advanced Preparation

- Purchase seeds from a garden center or health-food store.
- Run a trial experiment one week in advance to verify seeds' viability.

- Duplicate copies of [blackline master 1.3 \(PDF\)](#), one per child.
-

Suggested Sequence

1. Talk about how germs can live on hands. Ask children what they think germs need to grow on human hands. [*Moisture, organic material also called dirt and natural oils.*] Tell them they are going to do an experiment that will show them how seeds grow, which is much like how germs grow.
 2. Ask children to trace the shape of their hand onto six to eight layers of paper towels.
 3. Align and stack all but two of the paper towel hands on the plastic plate or pie pan. Spray them with water.
 4. Sprinkle about two tablespoons of seeds into the center of the stack of hands. Cover the seeds with the top two layers. Dampen down the seeds and the top layers with more sprays of water. Pour off any pools of water to prevent excess moisture. Place the plate or pan in a plastic bag, but do not seal it.
 5. Have children sketch the appearance of the experiment in the area labeled “Day 1” on the worksheet.
 6. Put the damp paper towel hands in a well-lit area of the classroom. Direct sunlight will make the hands too hot and should be avoided. Spray them lightly with water twice daily.
 7. Each day for four to six days, children should observe the hands and make a labeled sketch on their worksheets. Children may also use magnifying glasses to examine the different parts of the sprouting seeds. Fungi (mold) may grow on some hands. If this occurs, seal the plastic bag to prevent irritating any children with allergies and ask the child whose bag was sealed to observe a classmate’s experiment.
-

Check for Understanding

Ask the following questions:

- What did the seeds represent?
- What conditions do seeds — and germs — need to grow?
- Do seeds grow on real hands?
- What kinds of things do grow on hands?

Extensions

- Plant seeds in soil set into plastic cups with drain holes and watch them grow for a longer period of time. The cup can be decorated with a little face and children can cut its “hair.”
 - Ask children to outline their hands again and draw the places where they think germs are most likely to live. [*Under finger nails, around cuticles, grooves in skin, under rings.*]
-

Words to Share

- Fungi
- Seed
- Seed germination