



ACTIVITY 2: ALIEN HEADS

Background:

On the International Space Station, you can't grow plants in a flower pot as you do on Earth. If you tried, your dirt would just float away! This poses a major problem for astronauts on long trips into deep space. It is hard to pack enough fresh food to travel anywhere farther than the Moon. And after a few weeks, anyone would get tired of eating dehydrated food every day.

Luckily, some very smart scientists at NASA have come up with ways to grow plants in microgravity (a condition, especially in space orbit, where the force of gravity is so weak that weightlessness results). These techniques use only water (hydroponics) or a thick gel (a substance called agar). Now astronauts can grow tomatoes, radishes, lettuce and several different types of herbs—a real space salad! Science Officer Don Pettit had an even more creative brainstorm while flying on the International Space Station—he grew basil and tomatoes by using an extra pair of his underwear! He filled his underwear with paper towels, planted seeds between the towels and his underwear, and added water. It worked!

The experiment below uses clothes too—in this case a spare pair of nylon stockings. If you use some decorations, you could end up with sprouted seeds that look like a space alien!

Objectives: Discuss conditions suitable for plant growth; plant and care for growing seedlings; practice measuring skills; create a graph or a science log to record your results.

Materials:

- Nylon Stocking
- Small plastic cup (such as the type dentists use for rinsing)
- Potting soil
- Grass seed
- Markers
- Decorations of choice (googly eyes, glitter, pipe cleaners etc...)

Activity:

1. Place the toe end of the stocking in the plastic mouthwash cup, stretching the top around the mouth of the cup to hold the stocking open.
2. Sprinkle about 1 tsp of grass seed in the toe of the stocking
3. Fill the stocking with about 1/4cup of potting soil.
4. Carefully pull the stocking off the mouth of the cup and tie a knot in the loose end close to the soil and grass seed.
5. Cut off extra from the leg of the stocking
6. Gently form the soil and grass seed into a ball.
7. Place the ball knot-side down in the cup.
8. To turn your plant into an alien, glue googly eyes to the nylon, decorate the cup with pipe cleaners, etc.
9. When decorations are dry, water and place in sunny area
10. Measure and record the growing grass as the “hair” on your alien grows over the next several days!!!

