

Elementary STEM Activity 2

Subject: Science (Biology)

Topic: How Plants Grow

Grade Level: 1-5

Objective:

Students will investigate how sunlight and water affect plant growth.

Learning Outcome:

- Identify what plants need to grow (water, light, air, nutrients).
- Make and record daily observations using words and simple measurements.
- Compare results and explain patterns using evidence.

Materials Needed:

- Fast-growing seeds (beans or maize)
- Soil
- 3 cups or small pots
- Water
- Sunny window or outdoor area
- Marker/labels
- Ruler (optional)

Activity Steps:

1. Label three cups: A (sun + water), B (shade + water), C (sun + no water).
2. Fill each cup with soil and plant 2–3 seeds.
3. Place cups A and C in sunlight; place cup B in shade/indoors away from sun.
4. Water cups A and B daily (same amount); do not water cup C.
5. Observe for 7 days and record changes (sprout height, leaf color, number of leaves).
6. Compare growth and discuss what conditions helped plants grow best.

Recording Table:

Day	Cup A (Sun+Water)	Cup B (Shade+Water)	Cup C (Sun+No Water)
1			
3			
5			
7			

Discussion Questions:

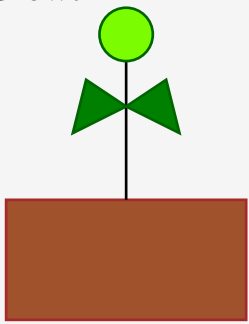
- Which cup grew fastest? Why?
- What happened to the cup without water?
- What would happen if we used more/less light?
- How do plants help people and animals?

Extension Activity:

Have students try a second week using different variables (more water vs. less water) and graph the results.

Illustration:

Plant Growth



Sunlight