Name_____
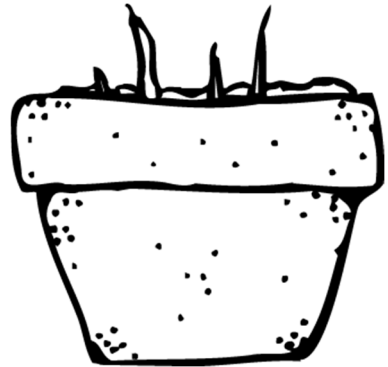
Growing Seeds to Learn the Scientific Method

Objective:

Students will learn the steps of the scientific method by conducting an experiment to see what happens when seeds are given different amounts of water.

Materials:

3 small cups or pots
9 seeds (bean seeds work well)
Soil
Water
Measuring cup
Ruler (to measure plant growth)
Labels or sticky notes (to mark each cup)

The Scientific Method Steps:

Ask a Question:

What happens to plants if we give them different amounts of water? (or ask your own)

_____

_____

Make a Hypothesis: (What do you think will happen?)

I think the seeds that get more water will grow taller. (or make your own)

_____

_____

Plan the Experiment: Here's how we will test our hypothesis.

We will plant seeds in three different cups.

Each cup will get a different amount of water:

Cup 1: 1 tablespoon of water

Cup 2: 2 tablespoons of water

Cup 3: 3 tablespoons of water

We will water them every other day for two weeks and see what happens!

Gather Materials:

Get your cups, seeds, soil, and water ready.
Label each cup: Cup 1, Cup 2, and Cup 3.

OBSERVATION

QUESTION

RESEARCH

HYPOTHESIS

EXPERIMENT

CONCLUSION

Do the Experiment:

1. Fill each cup with soil.
2. Plant 3 seeds in each cup (press them gently into the soil).
3. Water each cup with the correct amount: Cup 1 gets 1 tablespoon, Cup 2 gets 2 tablespoons, and Cup 3 gets 3 tablespoons.
4. Place all three cups in the same sunny spot.
5. Water the cups every other day for two weeks.

Observe and Record Data:

Every day, observe the seeds and record what you see. Use a ruler to measure how tall the plants grow. Write down the height of each plant on a chart once they germinate.

Measurement Day	Cup 1 Height cm	Cup 2 Height cm	Cup 3 Height cm
1 (after germination)			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Analyze the Results:

After two weeks, look at the data.

Which cup had the tallest plants? _____

Which one had the shortest? _____

Compare the results to your hypothesis. Were you right or wrong? _____

_____

Draw a Conclusion:

Based on the results, what did you learn?

_____

_____