

Limits to Growth

Procedure

- 1. Collaborate** Work with a partner. Label the three cups *A*, *B*, and *C*. Place soil into the cups until they are nearly full. Each cup should contain roughly the same amount of soil. **Safety:** Wear goggles when handling soil.
- 2. Use Variables** Place 2 seeds in cup *A*. Place 10 seeds in cup *B*. Place 20 seeds in cup *C*.
- 3. Measure** Measure and pour 25 mL of water into each cup.
- 4. Record Data** Place all three cups in a sunny spot. Fill in the first column of the chart below.

Plant Growth												
	Cup A				Cup B				Cup C			
Dates Watered												
Measured Growth												

- 5. Observe** Over the course of the next two weeks, water the cups when the soil is dry and measure growth. Be certain that all the cups receive the same amount of water and sunlight. Record your observations at least twice a week.

Conclusion

Write the answers to the questions.

1. **Observe** What differences did you observe in the growing seeds?

2. **Hypothesize** What factor might have caused these differences?

3. **Use Variables** Why was it important to give each cup the same amount of sunlight and water?

Investigate More!

Design an Experiment Design an experiment to determine how sunlight affects growth. Remember to keep other variables constant, and to include a control.

