



Seeds and Needs

Grade Levels: 4-6

Background

Plants need energy from the sun, water and oxygen to grow. Which of these items is the most useful?

Questions

Will seeds grow faster with more water?

Will seeds grow faster with more sunlight?

Possible Hypothesis

Seeds will/will not grow _____ with more _____.

Materials

- Packet of bean seeds
- Water
- Tablespoon
- 20 Snack-size zip-lock bags

Procedure

1. Label ten bags from 1 to 10. Label the other ten bags 1-S to 10-S.
2. Place two seeds in each bag.
3. Add one tablespoon of water to bags 1 and 1-S, two tablespoons of water in bags 2 and 2-S, and so on until all the bags have water.
4. Place the bags in a sunny place. Leave the bags marked with an S in the sun all the time. Leave the other bags in the sun for two hours a day.
5. Compare the beans in the bags after one week. Record your observations.

Analysis and Conclusion

What effect did the amount of water have on seed growth? What effect did the amount of sunlight have on seed growth? Do you think the seeds would grow better if they were in sunlight 24 hours a day?

