

The Life of Plants

Name: _____

Date: _____

How Seeds Grow

This experiment will help you see how seeds sprout and grow and what they need to grow well.

Words you will need:

Control: The item in an experiment that has nothing new done to it. It provides a starting point for comparison.

Theory: An idea about what might happen in the experiment.

Seeds need soil, water, light and air in order to grow. Most seeds need the soil to be the right temperature as well. Some seeds sprout better when the soil is cool, while others won't grow unless they are warm enough. Seeds also need to be planted at the right depth so that their leaves can quickly reach up above the soil for light and air. What do you think would happen if a seed was planted too deeply? What might happen if it weren't planted deeply enough?

My Theory: Draw a picture of what you think might happen to seeds planted either too deeply or too shallowly.

Experiment 1

Materials:

Glass Jar
6 seeds (all the same kind)
Soil
Pencil and ruler
Water

Procedure:

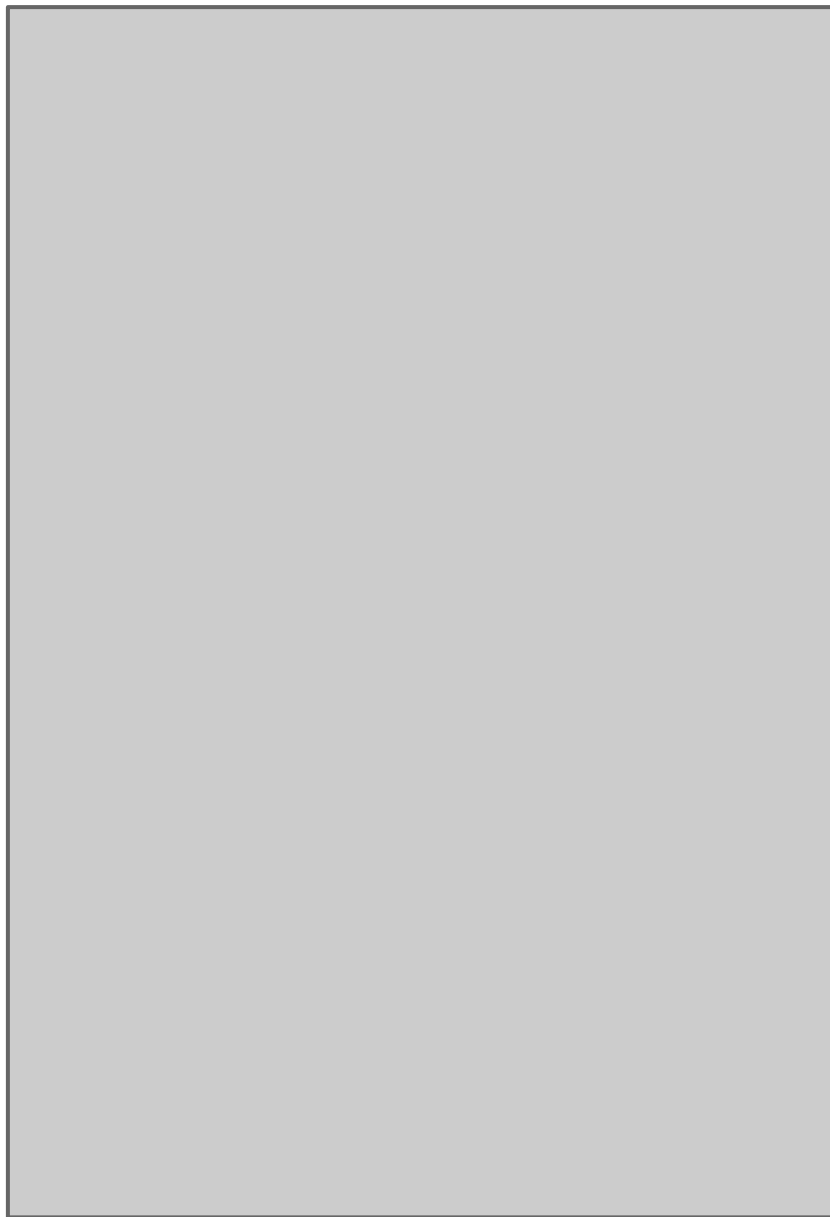
1. Fill the jar with soil and pat lightly.
2. Make three pairs of holes in the soil with the pencil, three on each side. Each pair of holes should be at a different depth.
3. Draw a picture of your jar with the holes, measure the depth of each hole and label it on your drawing.
4. Put on seed in each hole and cover with soil. One pair of seeds (control) should be buried at about three times it's diameter. The others should be buried either more or less than that.
5. Water the seeds until the soil is moist but not soaking. Cover the jar with plastic wrap and place the jar in a paper bag.
6. Each day take the jar out, draw a diagram of what you observe and return the jar to the bag.

Diagram 1: Jar With Seeds



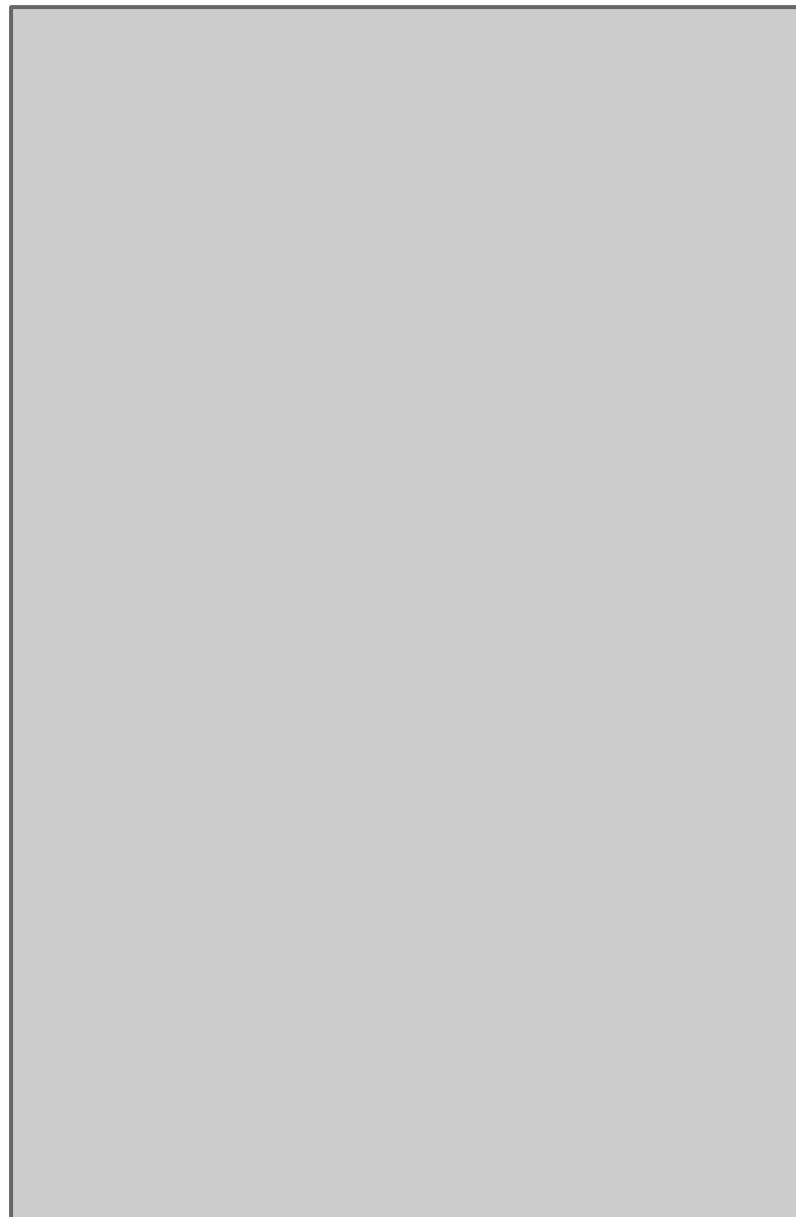
Diagram

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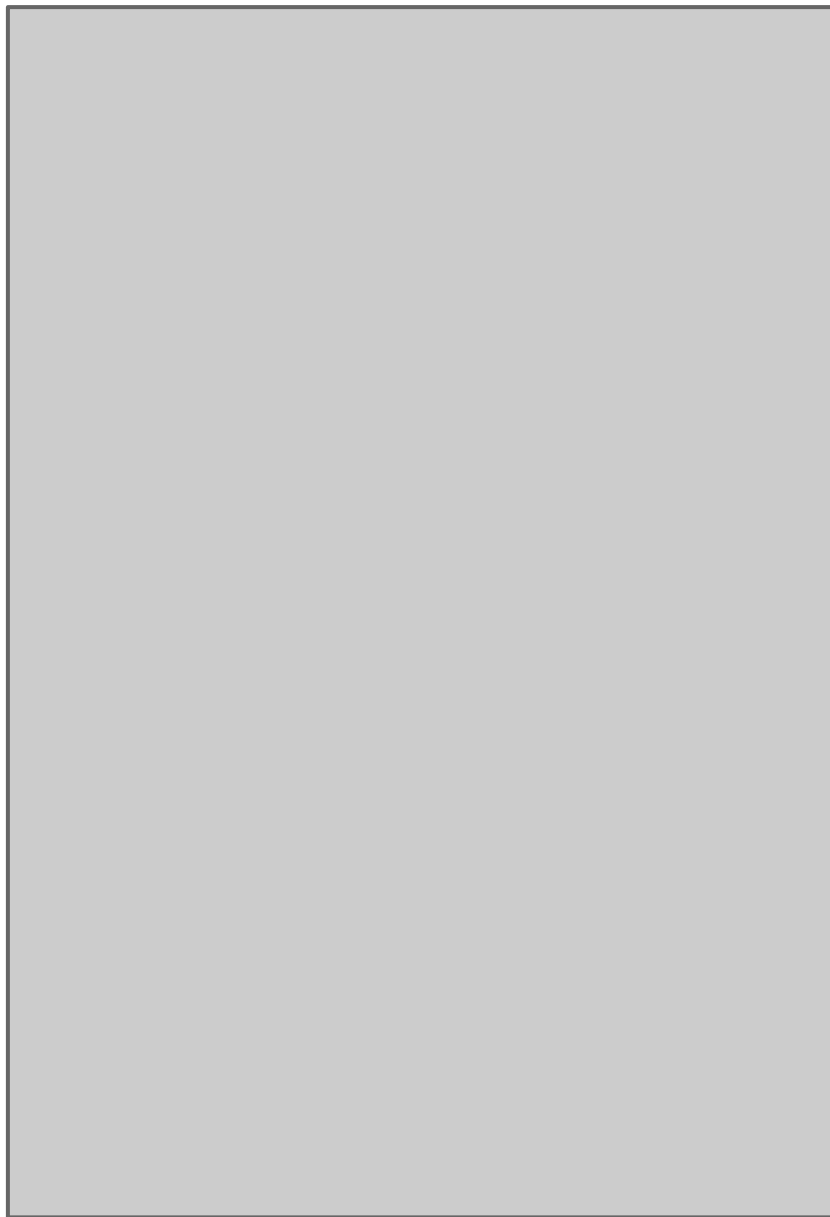
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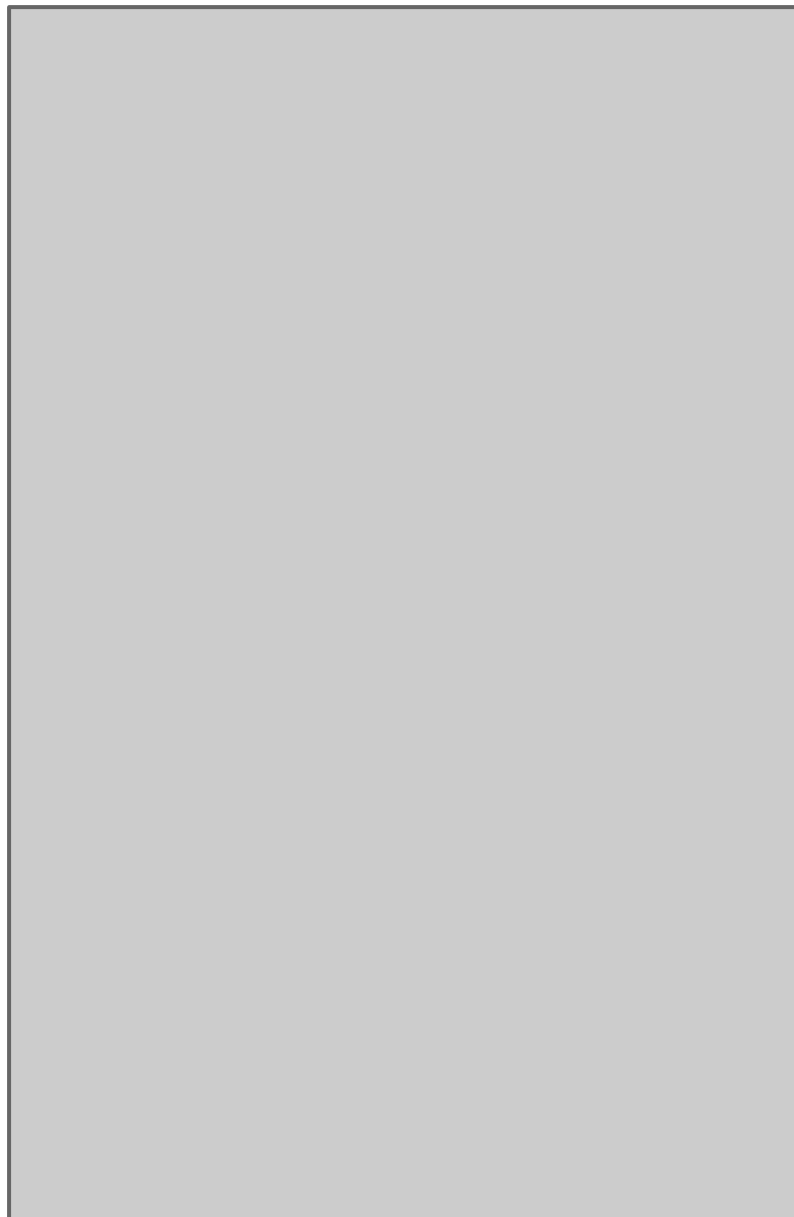
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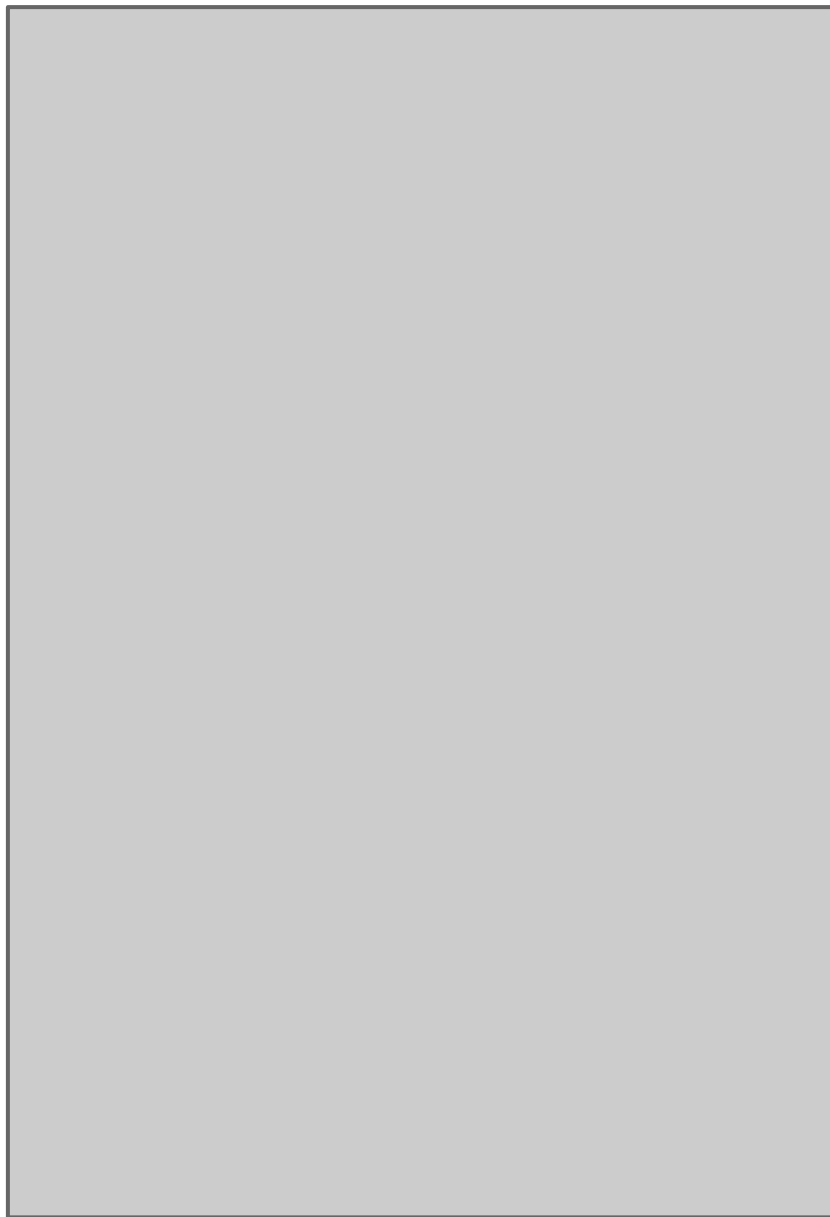
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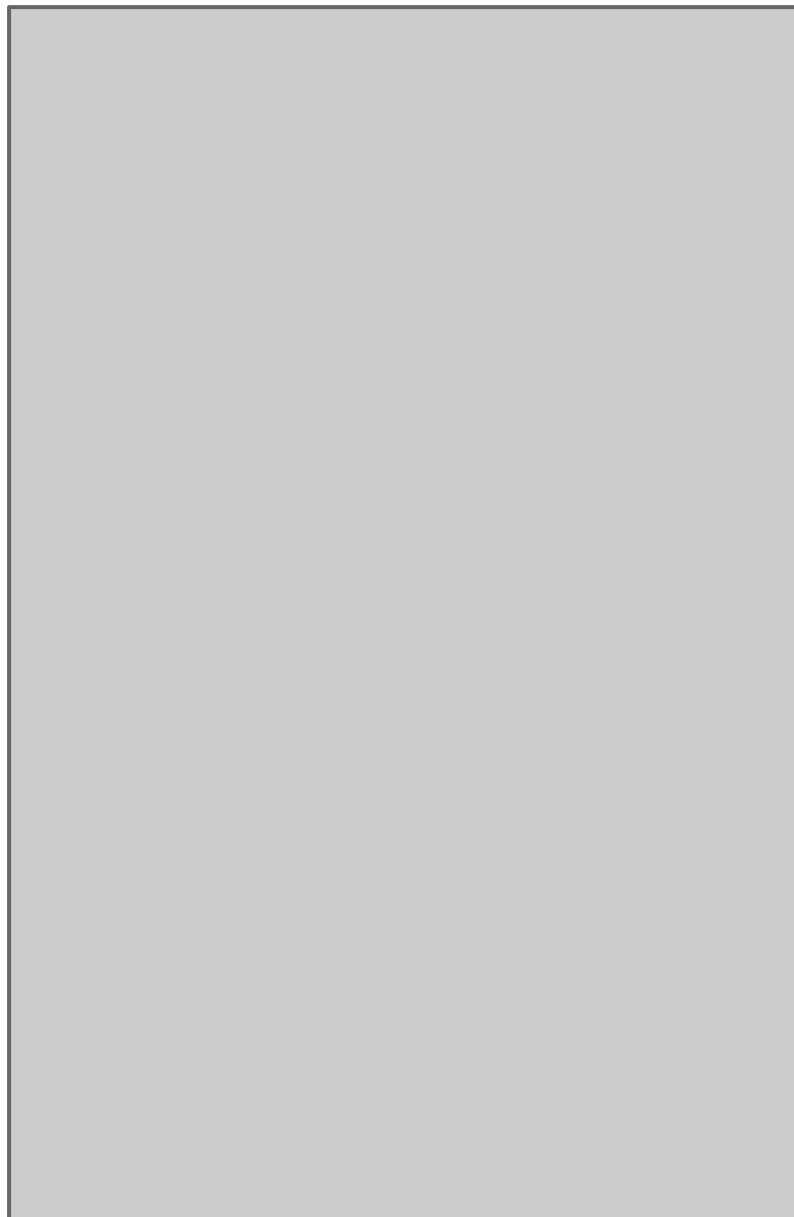
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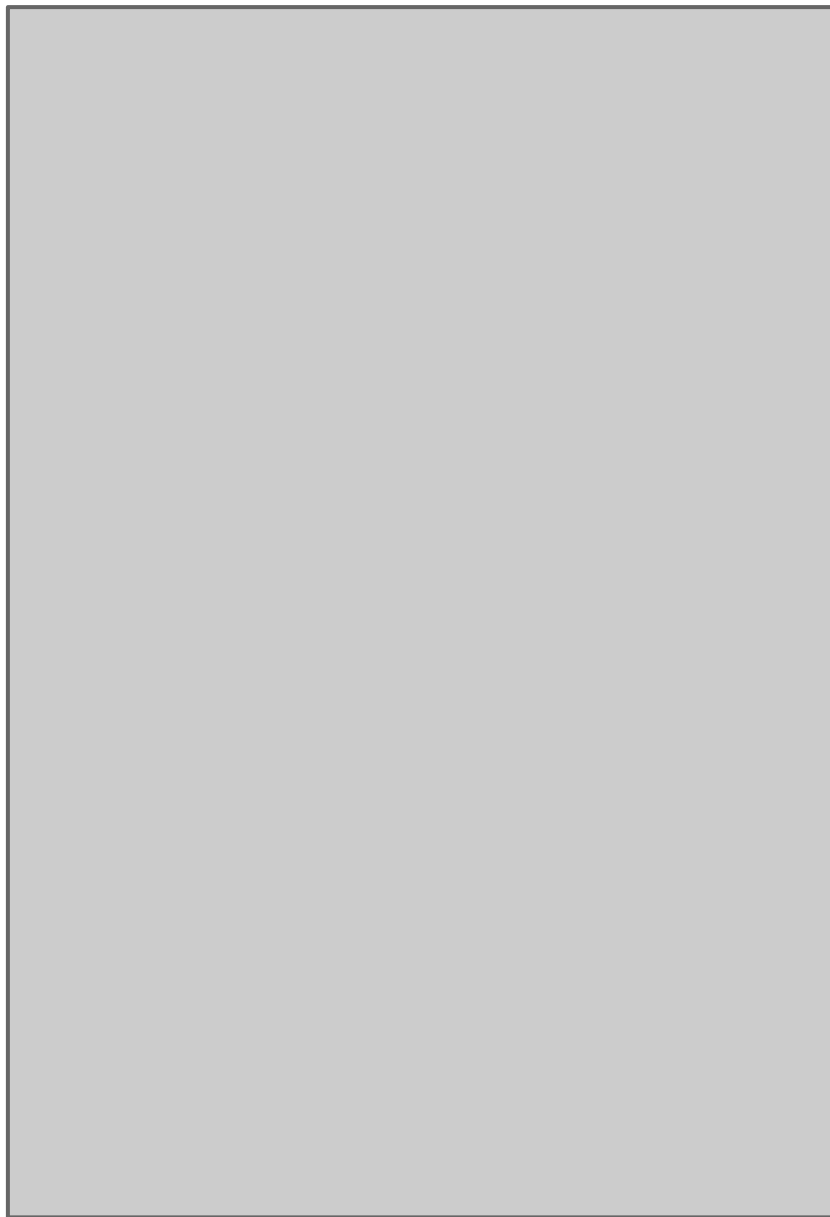
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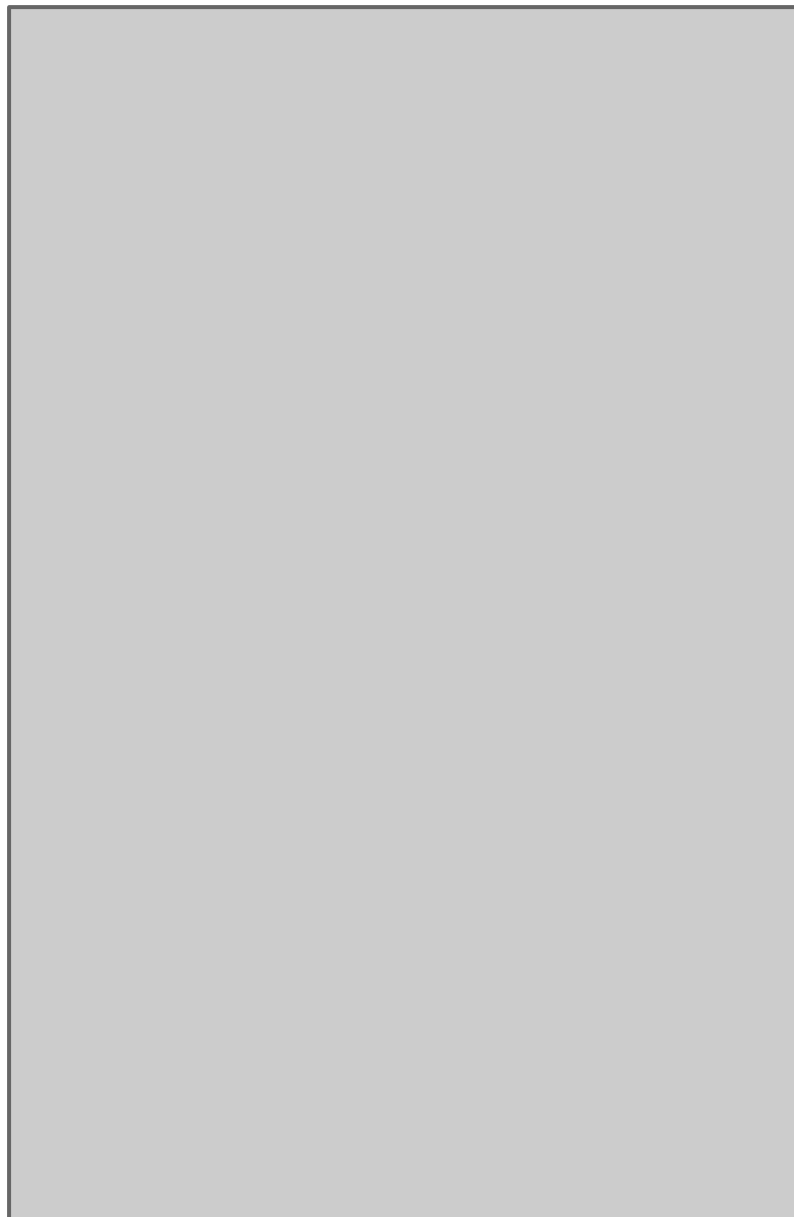
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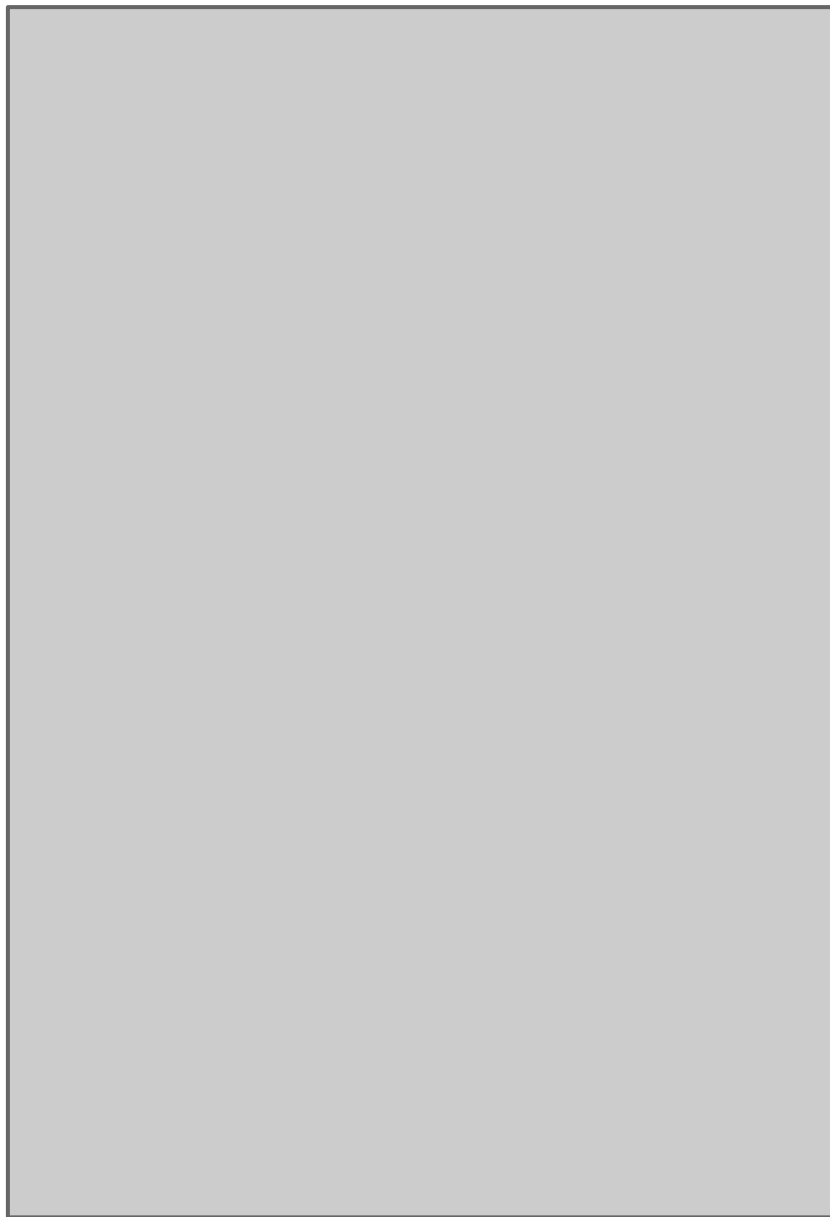
Diagram

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Diagram

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Diagram

Date:



Experiment 1: Conclusions

What happened to the control seeds?

What happened to the seeds planted deeply?

What happened to the seeds planted shallowly?

What differences do you observe between the three sets of plants?

Draw diagrams of one plant from each set and label the differences.

