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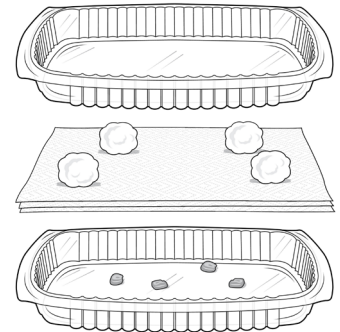
# Plant Growth Investigations, Part 1

## Part 1: Plant Growth and Gravity Investigation Setup

**Question:** Does gravity affect the direction of a plant's growth?

**Setup:**

1. Place four corn seeds in a plastic lid. Face the pointy part of each seed in a different direction. Space the seeds apart from one another.
2. Lay two wet paper towels over the seeds. (This will give the seeds the water they need to grow.)
3. Place four cotton balls spaced apart on the paper towels. (This will keep the two lids from squeezing the seeds too tightly.)
4. Fit the second lid into the first lid and tape the edges. Write "TOP" on the tape on one long end of the lids.
5. Write your names on a piece of tape and place it somewhere visible on the lids.



**Plan:**

What will you change about the seeds in your setup?

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What will you observe and record?

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What will you keep the same in every setup?

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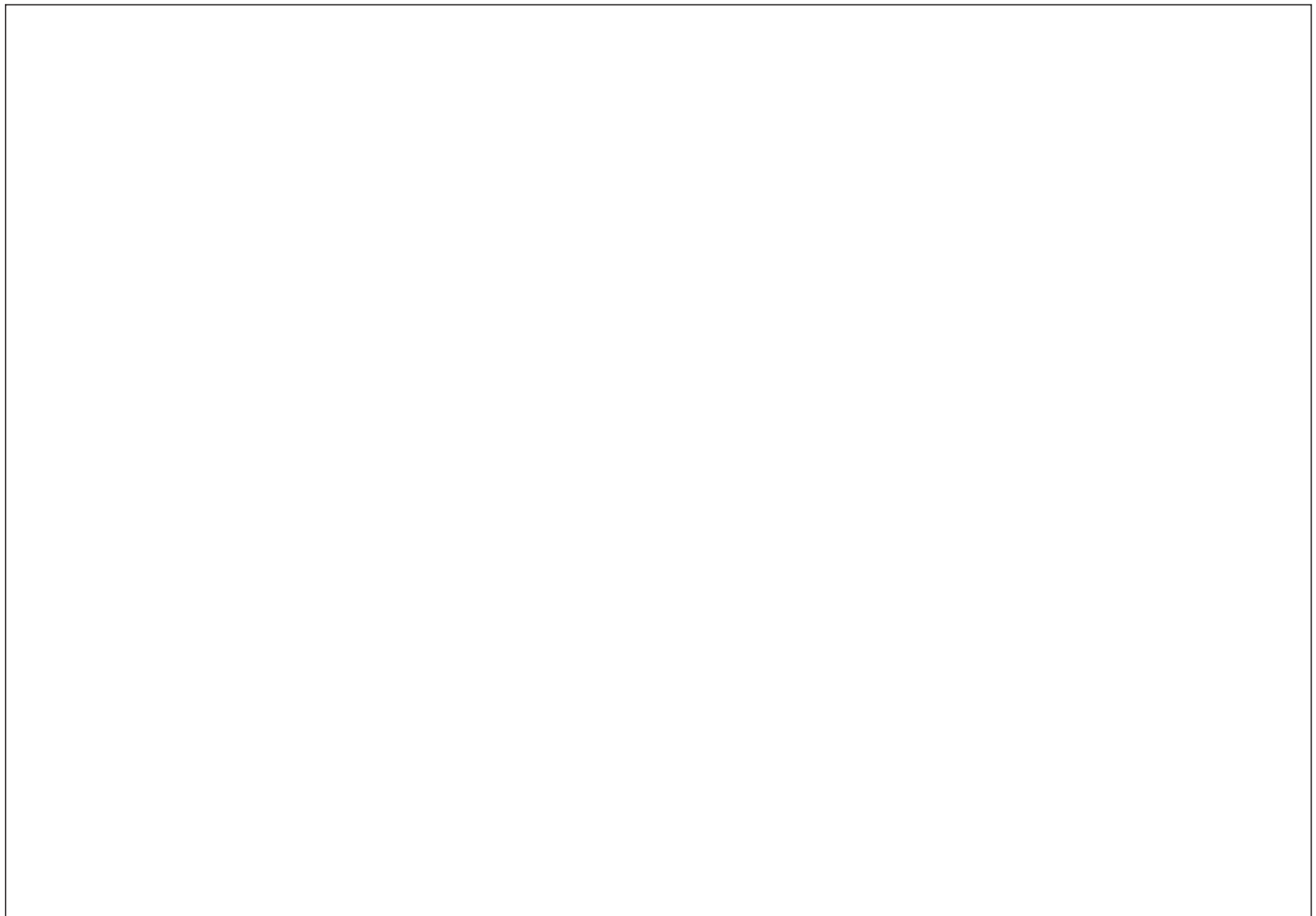
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## Plant Growth Investigations, Part 1 (continued)

### Predict:

1. Draw the four seeds, showing which direction the pointy part of each seed is facing.
2. For each seed, draw and label a root and a stem, showing which direction you think each will grow.



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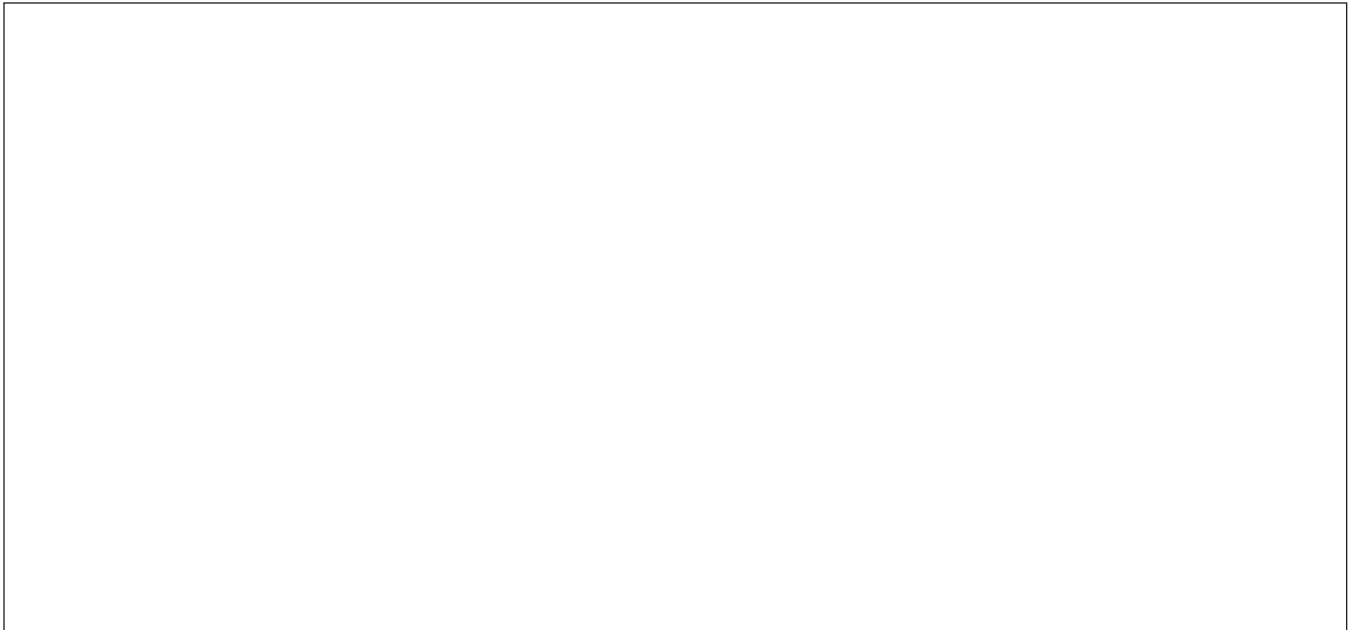
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## Plant Growth Investigations, Part 2

### Part 2: Plant Growth and Gravity Investigation Results

#### Record Observations:

After some growth, draw the four seeds. Show which direction the pointy part of each seed is facing, and the growth of the stem and root. Label which you think is the stem and which is the root for each seed.



Describe what you notice about the direction of growth of stems and roots.

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#### Analyze:

Explain what you think this shows about the question *Does gravity affect the direction of a plant's growth?*

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Plant Growth Investigations, Part 3

### Part 3: Plant Growth and Light Investigation Setup

**Question:** Does the location of light affect the direction of a plant's growth?

**Plan:**

What will you change between each setup?

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What will you observe and record?

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What will you keep the same in every setup?

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Plant Growth Investigations, Part 3 (continued)

### Setup:

Draw and label a diagram of your investigation plan.



### Predict:

Describe what you think will happen and why.

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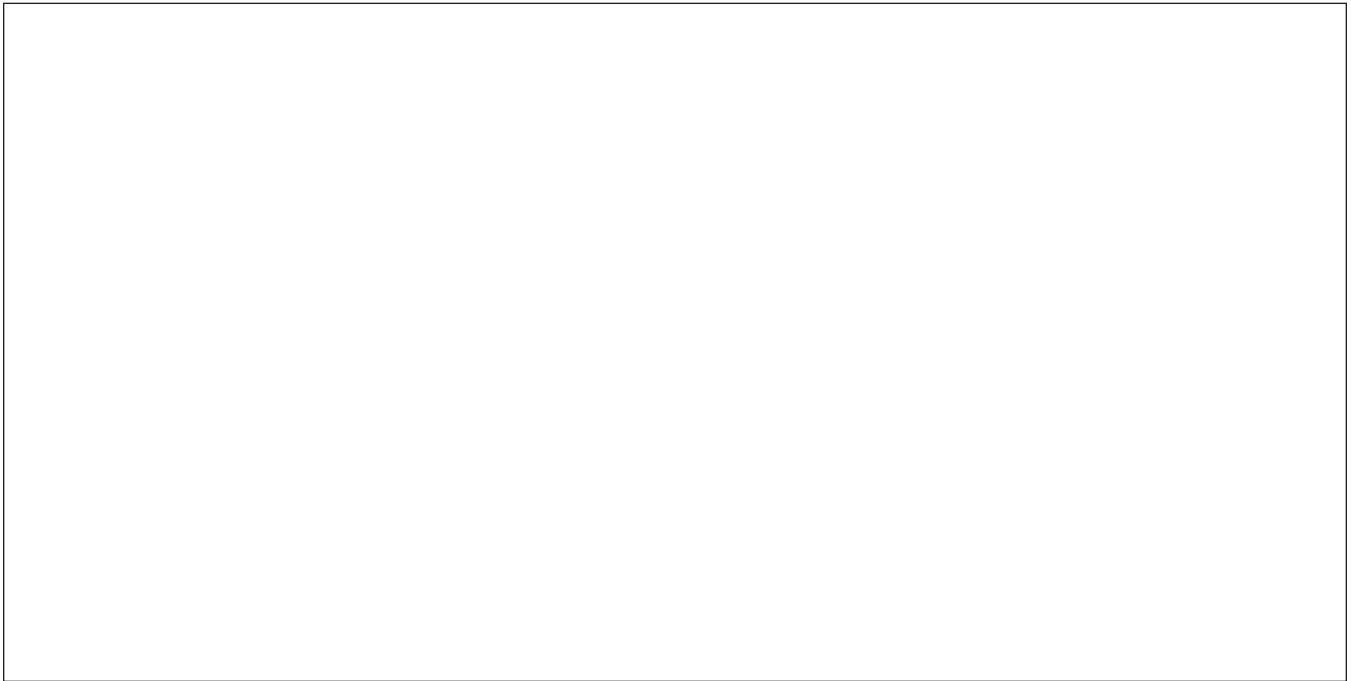
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## Plant Growth Investigations, Part 4

### Part 4: Plant Growth and Light Investigation Results

#### Record Observations:

Draw and label observations after a few days of growth.



Describe what you observed about the direction of growth.

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#### Analyze:

Explain what you think this shows about the question *Does the location of light affect the direction of a plant's growth?*

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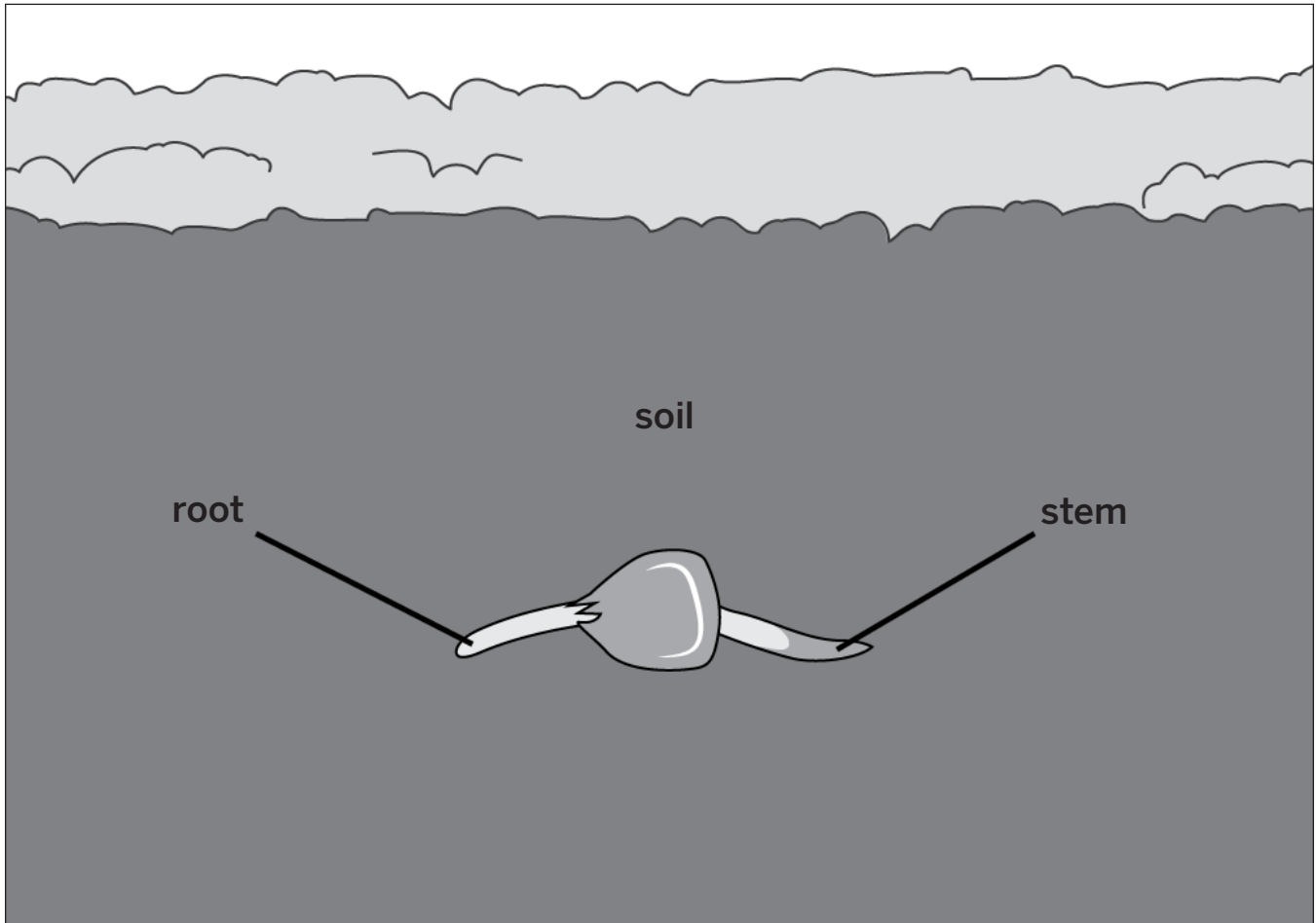
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## Plant Growth Investigations, Part 5

### Part 5: Plant Growth Prediction

1. The diagram below shows a seed that is sprouting underneath the soil where there is no light. On the diagram, draw what you think will happen after several days of growth.



2. Explain why the root and stem will grow in the way that you drew it.

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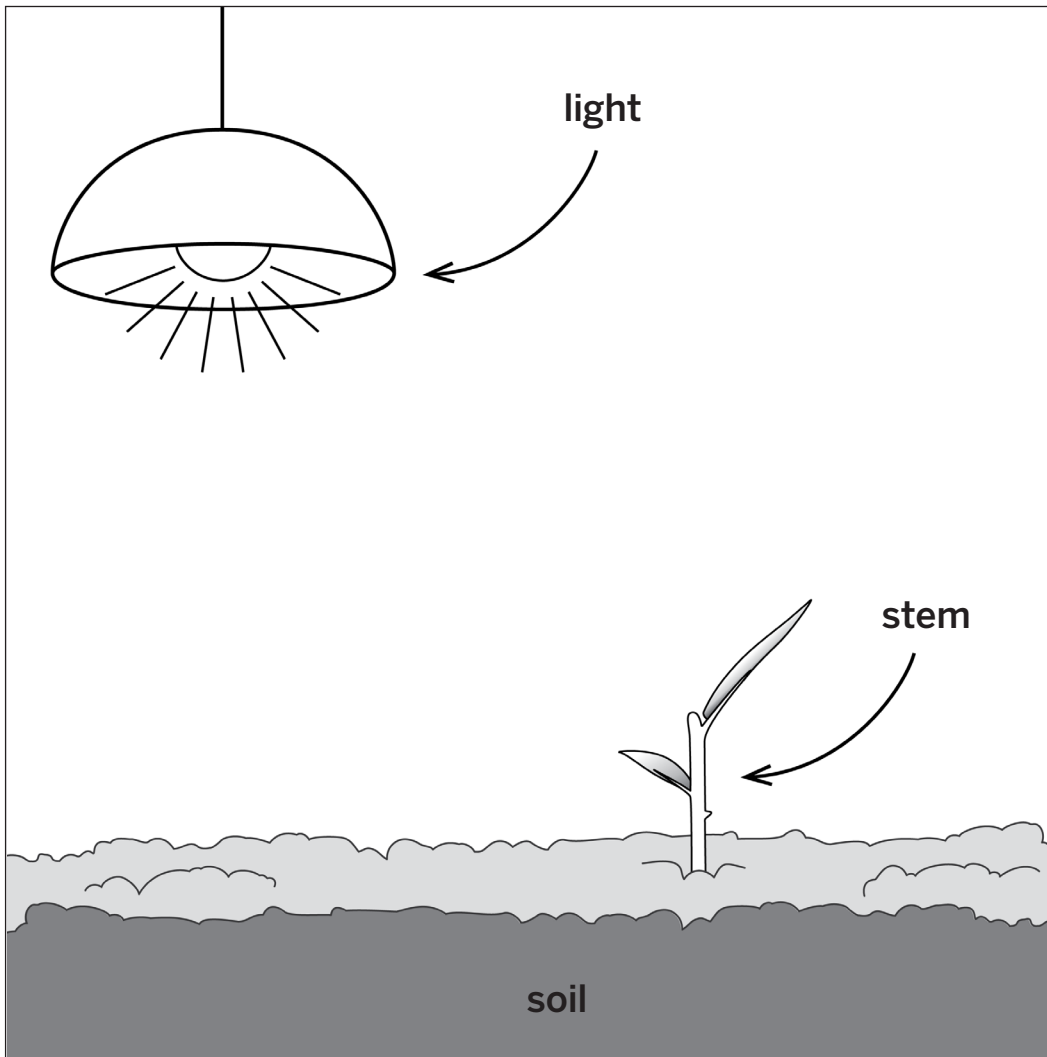
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### Plant Growth Investigations, Part 5 (continued)

3. The diagram below shows a plant that just sprouted from the soil. On the diagram, draw what you think will happen after several days of growth.



4. Explain why the stem will grow in the way that you drew it.

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