

# Plant Growth

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

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

## What are the Various Parts of a Plant and Their Purposes?



### Explore: What Do Stems Do?

#### Question

What is the purpose of the stem of a plant?

The **stems** of a plant are often the part of a plant that we use as food sources. The stem of a plant contains **xylem** and **phloem** tissues within it. You learned in previous activities that food items such as asparagus, rhubarb, and celery are the stems of plants. Look a little bit closer at the purpose of a stem of plant.

#### Hypothesis

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Based on your prior knowledge, make an educated guess of the answer of the question above.

- What is the purpose of the stem of a plant?



### Skill Builder

How to make a hypothesis.

If you need to use this [Skill Builder](#), access it from the online course.

## Resources

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- two stalks of celery
- food colouring
- two glasses, cups, or flower vases

## Procedure

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- 1 Pour about one-half cup (125 mL) of water into each glass. The amount need not be exact, but it must submerge the **stem** of celery by several centimetres.
- 2 Drop five or six drops of food colouring to dye the water. Use a different colour for each cup. Use a bold and distinct colour so that it will show in the celery leaves.
- 3 Place a celery stalk (with leaves) in each glass and let them sit overnight.
- 4 Draw what you see in the first column of the observation table. Explain your drawing.
- 5 In the morning, check your celery. Draw what you saw the next day in your observation table. Explain your drawing.

## Observations

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### Observation Chart

<b>Day 1:</b> Attach an image or draw what you see at the beginning of the experiment.	<b>Day 2:</b> Attach an image or draw what you see at the beginning of the experiment.

## Conclusion

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- 1 What is the purpose of a **stem** of a plant? Be sure to include how you know this. (For example... "The purpose of the **stem** of a plant is... I know this because...").

**2** Is this the only purpose of the **stem** of a plant? If no, what other purpose does the stem have?