



SCIENCE EXPERIMENT LAB SHEET

Name: _____

Date: _____

Observing Capillary Action in Celery Sticks Dipped in Dye

QUESTION

How does capillary action cause colored water to move up through celery sticks?

BACKGROUND

Capillary action is the movement of liquid through tiny spaces without the help of gravity. In plants, this helps water move up through narrow tubes in the stems and leaves. In this experiment, you will see how capillary action works in celery.

MATERIALS

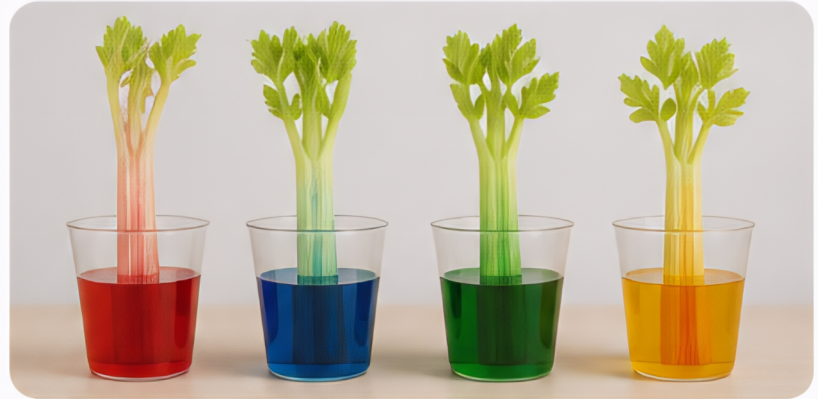
- ☐ 3-4 celery sticks with leaves
- ☐ 3-4 clear cups or jars
- ☐ Water
- ☐ Food coloring (different colors)
- ☐ Knife (for adult use)
- ☐ Ruler
- ☐ Paper towels

PROCEDURE

- 1 Fill each cup with about 1 cup of water.
- 2 Add 10-15 drops of food coloring to each cup. Stir to mix.
- 3 Cut the bottom of each celery stick at a slight angle.
- 4 Place one celery stick in each cup of colored water.
- 5 Put the cups in a spot where you will not disturb them.
- 6 Observe the celery sticks over the next several hours or up to 24 hours.
- 7 Record your observations in the table.

CONCLUSION

What did you learn from this experiment?



HYPOTHESIS

What do you think will happen when celery is placed in colored water?

OBSERVATIONS

Time	What do you see happening?	How far has the color moved up the celery? (cm)
Start		
1 hour		
3 hours		
6 hours		
24 hours		

ANALYSIS QUESTIONS

1. What happened to the colored water over time?

2. Which color moved the farthest up the celery? Why do you think that is?

3. How does this experiment show capillary action?



THINK MORE: Where else in plants do you think capillary action helps move water? How is this important for the plant?