

JR-SCIENTISTS

CELERY OSMOSIS

A quick rummage through the fridge, and you can come up with a simple way to explain and show how osmosis works!

INSTRUCTIONS

STEP 1: Cut the bottoms of the celery off so that you have a fresh cut.

STEP 2: Fill your containers at least half-way with water and add 15-20 drops of food coloring.

STEP 3: Place your celery into the water and wait!

STEP 4: Wait 2-24 hours. Make sure to observe the process at regular intervals to note the progress.

SUPPLIES

Celery stalks
Food Coloring
Jars
Water

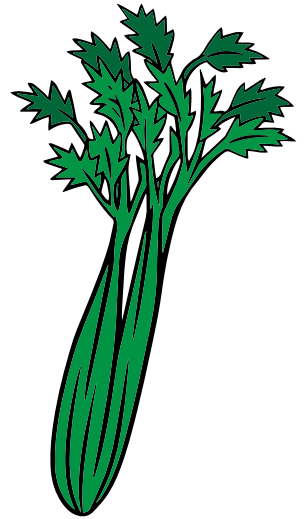
THE SCIENCE

Plants are filled with cells and the water moves through the cells and cell walls by the process of osmosis and capillary action. This process of filling the cells also stiffens the stalks, stems, and leaves. This is known as turgor pressure. Without water, the cells lose their shape because this pressure is not there without the necessary water. If you see a wilted or droopy looking plant this is what's happening! Give it some water and observe the results!



Celery Osmosis Observations

Use this worksheet to process and evaluate your work.



What did you learn about capillary action?

What do you think will happen to the celery?

What did you observe?

After 5 minutes: _____

After 1 hour: _____

After 24 hours: _____