### -JR-SCIENTISTS

# COLOR CHANGING FLOWERS

Color changing flower science is a wonderfully simple science and STEM experiment you can do any time of the year.

#### **INSTRUCTIONS**

**STEP 1:** Cut the bottoms of the flower stems so that you have a fresh cut.

**STEP 2:** Fill your containers half-way with water and add food coloring. The more food color, the sooner you'll see results. 15-20 drops at least.

**SUPPLIES** 

White flowers
Food Coloring
Jars
Water

**STEP 3:** Wait 2-24 hours. Make sure to observe the process at regular intervals to note the progress.

#### THE SCIENCE

When water climbs up things like small tubes, we call it capillary action. Water does this because it's sticky! Not sticky like glue, but sticky like the way water sticks to your fingers after you wash your hands. Water sticks to the inside of the tube and starts to move upward. It also sticks to itself, so it pulls more water up with it as it climbs. Eventually, capillary action lets water climb up to all the different parts of a plant through the xylem tubes in the stem. The small "vessels" in the celery stalks carry the water and color to the leaves, like the way blood travels through your body.





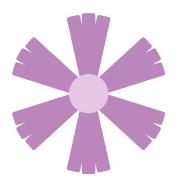






## Color Changing Flowers Observations

Use this worksheet to process and evaluate your work.



What did you learn about capillary action?
What do you think will happen to the flowers?
What did you observe?
After 5 minutes:
After 1 hour:
After 24 hours: