



## Activity: Staining Science



### What You'll Need:

- Leafy celery stalks or white carnation flower
- Mason jars or drinking glasses filled with water
- Food coloring
- Scissors or knife (used with adult assistance)

### Procedure:

#### Step 1

Fill the jars or glasses halfway with water. Place a few drops of food coloring in each of the glasses, using a different color in each.

#### Step 2

Pick leafy stalks of celery and ask for help to cut them so they are all the same length from the leafy part to the cut part.



### Step 3

Place one celery stalk in each of the glasses and put in a sunny location.

OPTION: Make a lengthwise cut halfway up a celery stalk. Put each side of the bottom in a different cup of colored water and see what happens to the colors in the leaves!

### Step 4

Patience is key! Check the celery every 10 or 15 minutes for a few hours to see how the colors change. You can also move the containers into the refrigerator overnight to see what happens after a long time.

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## The Science Behind It:

Plants are just like people – they need nutrients to survive! When we water plants, the water picks up nutrients in the soil and carries them into all parts of the plants through very thin tubes inside of the stems and leaves. Cut plants like celery or flowers still have these tubes, so when we put them in water the tubes carry that water through the stem to the leaves and petals.

The way water moves through these tubes is called capillary action – the water from the glass finds the space in those tubes and the water molecules stick to themselves and the plant to fill up the tubes throughout the whole plant. When you see a plant that looks droopy, it might just need water!

### BEFORE WATERING, AND AFTER 90 MINUTES!

