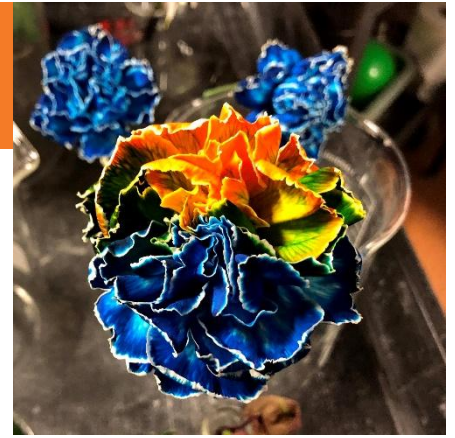


Stay at Home Science



Coloring Carnations

What You Need

Adult helper
Knife
White carnations
Straw
Tape or Binder clip
Food coloring

What You Do

1. Cut a 2 inch length of straw. Bend one end over and secure with tape or a binder clip to seal.
2. Add food coloring to the straw.
3. Have an adult trim the end of the flower to create a fresh cut. Place a flower in each straw.
4. Check your carnation every few hours. It might take up to 24 hours.

Questions to ask

- How long did it take for the flower to start showing color? How long until it was fully colored?
- If you attempted multiple colors, did they all take the same amount of time to color the flowers?
- How do you think the color got from the water to the petals?

What's The Science?

A few different processes are involved in plant "drinking" or transpiration. As water evaporates from flowers and leaves, the attractive force between water molecules, called cohesion, pulls more water along. This water moves upward through tiny tubes, called xylem, that run up a plant's stem. Although you might think gravity would pull the water back downward, the water sticks to itself and the walls of these tubes. This capillary action keeps water in the xylem in much the same way as water stays in a straw when you suck water through it, except evaporation and biochemical reactions provide the initial upward pull.

Try This

Use science vocabulary: Use related science words such as roots, stem, leaves, flowers, and petals as you talk and play together. Children learn new vocabulary words when they hear grown-ups use them in context.

Extend your activity:

- Have younger children point out the major parts of the plant that they can see (stem, leaves, and flowers).
- Try cutting a stem in half vertically and then putting each end in a different cup of water. Observe to see what happens.
- Repeat the activity using celery instead of carnations. Are the results the same?

Keep In Mind

- Children are natural scientists; let them lead the way in their experimentation! Encourage them to ask questions and make suggestions only when they are stuck/discouraged.
- The order suggested is not the only right or perfect way. Make adjustments based on the age, ability, and interests of the children.

Additional Resources

Planting a Rainbow by Lois Ehlart

