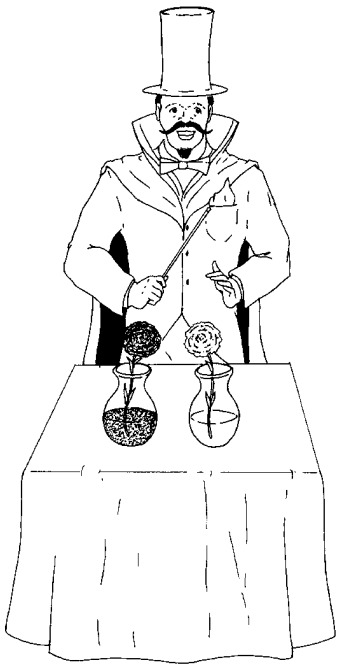
Plant Straws

One acre of trees produces enough oxygen for 18 people every day!

Equipment/Materials

white carnation
water
red and blue food coloring (others as you wish)
glass or other small glass container
paring knife



Procedures

1. Fill the glass or other container with about 1 cup of warm water.
2. Add 6 drops of red food coloring to the water and stir.
3. Using a sharp knife, cut approximately 1 inch off the bottom of the carnation stem.
4. Place the carnation in the glass of colored water, just as you would put any flower in a vase.
5. Leave the flower in the colored water for several hours. Keep it in an easily observed place.
6. Describe what happened to the color of the flower.

   The flower became tinted with the dye.

7. Explain why the change took place.

   As the plant drew water from the dyed supply, the vascular tissues of the plant supplied water and food coloring to the flower itself, resulting in the flower changing colors.

8. Repeat the experiment, but split the lower part of the flower stem and place each half in differently colored water. Hint: Choose colors that will be visually pleasing.
9. Observe and explain the differences in the second experiment.

   The vascular tissues of the plant are similar to tubes, and the tissues serve different parts of the flower. As a result, the parts of the flower served by each colored water supply will be colored by the dye in that water supply.