



STEM Activity Idea:

WATER IN FLOWERS

Suggested Program Level: Daisy

See how water travels in flower stems, and create your own colorful blooms!

Supplies:

- long piece of cotton string tied in a loop
- 3 small bowls
- 2-3 vases
- water
- white flowers (carnations, daisies, Queen Anne's lace, etc.) with the end of the stems freshly trimmed

Instructions:

1. Explain that water helps keep flowers fresh by traveling up the flower stems to the blooms.
2. Fill the three bowls with water and let the girls add different food coloring to each bowl. Ask the girls to predict what will happen when you place the string in each bowl.
3. Drape the string between the three bowls, making sure that a portion of the string is submerged in each bowl of colored water. Make sure the girls can get close enough to the bowls to watch the color absorb into the string.
4. Explain that the string acted like a flower stem, moving the water. Ask the girls to predict what will happen when they try to do the same thing with flowers.
5. Let the girls fill the vases with water and food coloring, and then help them divide the flowers between the vases.
6. Let the vases sit for a day or two, checking on them regularly to discuss the progress.
7. Wrap up this activity by asking the girls to try this again at home, maybe with a different type of white flower, or by dividing the stem into two sections and putting each section in a different colored water.

Why?

Water travels through a process called "capillary action". It wants to travel from a place that has an excess of water, to a place that doesn't have water. The water traveled on the string, much like water absorbs into a paper towel. When the water is traveling in the flower stem it isn't clear to see until it reaches the white blooms and you can see the food coloring in the petals.