



#FontanaTogether

Rainbow Walking Water

In this experiment you will get to see how water can travel against gravity and up on to a paper towel. This process is similar to how water travels up a plants roots to the leaves in the tree top. This experiment is fun to watch and easy to do at home!



Materials:

- 6 glass cups or plastic see through cups
- Red, yellow, and blue food coloring
- Water
- Paper towels

Instructions:

1. Place 7 cups in a row and pour water in the 1st, 3rd, 5th, and 7th cup.
The fuller the cups the better.
2. Add 5 drops of red food coloring to the 1st cup and the 7th cup.
3. Add 5 drops of yellow food coloring to the 3rd cup.
4. Add 5 drops of blue food coloring to the 5th cup.
5. Take a half sheet of paper towel and fold it in half lengthwise and in half again lengthwise.

6. Trim off some of the length so that there isn't too much excess paper towel that will stick up in the air between each cup. This will make the water walk more quickly.
7. Place one half of a rolled paper towel in the 1st cup and place the other half in the cup next to it. Then another paper towel from 2nd cup and into the 3rd cup. This continues until you have placed the last paper towel that drapes over from the 6th cup to the 7th cup.
8. You should start to see the color creep up the paper towel. Continue to check back until all the paper towels are colored.



How it Works:

The water is able to move upward against gravity because of the attractive forces between the water and the fibers in the paper towel. The paper towel is made from fibers and the water is able to travel through the gaps in the fibers. This is what helps water climb from a plant's roots to the leaves at the top of the plant or tree.