

MAKE A RAINBOW



What you will need:

6 transparent (see through) glasses or jars

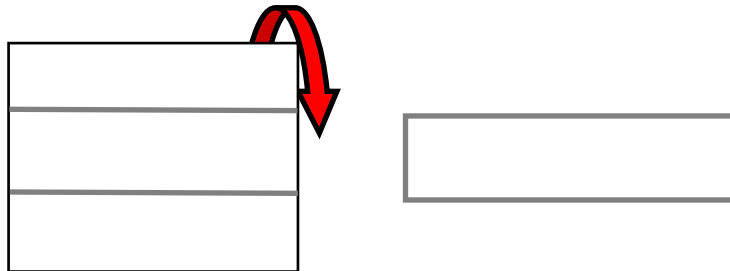
Paper towel—not too thick

Red, yellow and blue food colouring

Water

What you need to do:

1. Take 6 sheets of paper towel and fold them into thirds so you have 6 long strips.



2. Trim your six strips so that they fit perfectly into your containers. Yours should look like the paper towel on the left. The one on the right is too long.

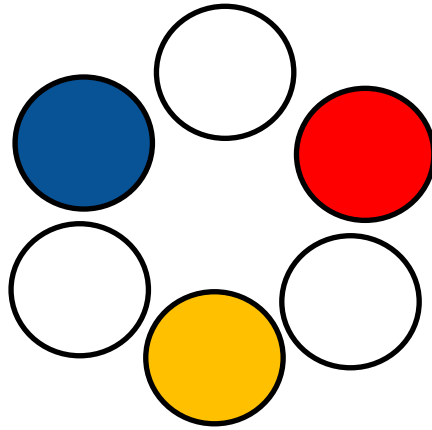


3. Line up your containers and very carefully put a good amount of red food colouring in the first one. Put yellow in the third one and blue in the fifth one.



4. Next fill the containers with the food colouring almost to the top.

5. Pull the glasses around so that they are in a circle. Use this aerial view to help you...



6. Now put the paper towel strips into the cups so that all of the cups are connected. Start with the red food colouring and work your way around.



7. Sit near your cups and watch as you answer the questions on the attached sheet.

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1. Draw your below or take a picture of your investigation set up.

2. Make a prediction. What do you think is going to happen? _____

3. Draw or take a picture of what has happened after 15 minutes.

4. Why do you think that the colours are changing? (Think about your work in art with Miss Cassidy.) _____

So, how does it work?

The water moves up the paper towels through a process called capillary action. The paper towel is made from fibers and the water is able to travel through the gaps in the fibers. The gaps in the paper towel act like capillary tubes and pull the water upward. This is what helps water climb from a plant's roots to the leaves at the top of the plant or tree.

You may like to test this out by standing a cut flower in a glass of food colouring and water.



5. What do you think will happen to the flower? _____

6. If I want to turn my flower purple, which colours of food colouring will I need to add? _____

7. Would it be possible to change my flower into more than one new colour?

Draw a diagram on the back of this paper to show what you think I would have to do. You could even test this out to see if it works?