

# SCIENCE MINDED

# Rainbow Magic



**Try out these cool rainbow-themed experiments at home.**

To do these experiments, you will need absorbent paper towels (Bounty works well), washable markers, permanent markers, water, an eye dropper (or a straw and your finger), a ruler, scissors, two small cups or bowls, and a tray or baking sheet)

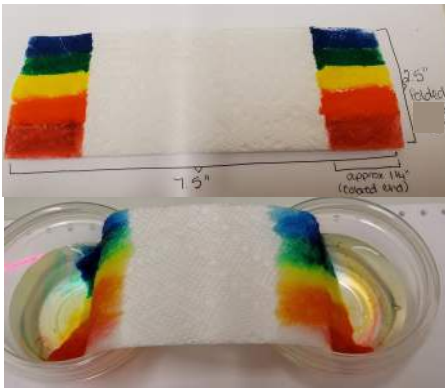
## Experiment 1: Traveling Rainbow

paper towel, washable markers, water, two small cups, scissors, ruler

1. Cut a piece of paper towel to 7.5 inches long and 5 inches wide. Fold it in half down the length.
2. On each end, using the colors of the rainbow or colors of your choice, color rectangles that are approximately 1.25 to 1.5 inches long. Be sure to add lots of marker at the end so that it can travel all the way up the paper towel.
3. Fill two cups of water about  $\frac{3}{4}$  of the way and place them a few inches apart.
4. Now place the ends of the paper towel into the cups without putting them in too deep.

## Now watch your rainbow grow!

Will the experiment work using permanent markers and water? What about permanent makers and rubbing alcohol? Try different combinations to see what happens.



## Experiment 2: Magically Appearing Rainbow

- paper towel, washable markers, black permanent marker, water, tray, eye dropper
1. Draw a thin rainbow on the paper towel using washable markers.
  2. Now draw on top of the colored rainbow with the permanent maker.
  3. Place the rainbow in the bottom of the tray and slowly drip water over the top.

**Now watch your rainbow reappear!**



## Experiment 3: Magically Appearing Rainbow v. 2

- paper towel, washable markers, black permanent marker, water, tray, cup
1. Fold the paper towel in half. With the fold at the top, draw a thin rainbow on the paper towel using a permanent marker.
  2. Open the paper towel and, following the faint lines left by the permanent marker, color the rainbow with washable markers. Fold the paper towel closed again.
  3. Place the rainbow in the bottom of the tray and slowly pour water over the top.

**Now watch your rainbow reappear!**

Based on your experience with the first experiment, why do you think the rainbow reappeared?



Want to learn the science?

Read about chromatography on ScienceFLIX. Look up “analytical chemistry.”