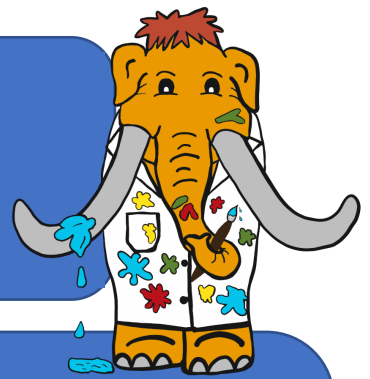


# Science Saturday @ Home

## Coffee Filter Color Mixing



**Gathering Supplies:**  
Coffee Filters  
Washable Markers (Red, Yellow, Blue)  
Plate  
Water

**How To Steps:** Let's use coffee filters to see what colors we can make with the three primary colors: red, yellow and blue.

1. Using your primary color markers make two circles. One larger circle one towards the outer end of the paper and one small one towards the center. Alternate the color that you are using along the lines. See picture.
2. Fold your filter in half, to make a half circle. Then fold in half again, making a shape like a slice of pizza. Then fold in half one more time. Try standing your shape with the center point sticking up.
3. Put a small amount of water on to your plate, like a puddle in the middle of your plate that is large enough to set your cone shaped filter into it.
4. Watch to the water get pulled up and into the filter. As the water rises what colors do you see appearing on your filter?
5. When the water is just about to the top of the filter, take the filter out of the water and unfold it. Set it somewhere to dry. Outside in the sun is a great way to get your filter to dry quickly.
6. Once the filter is dry, how many colors can you find on the filter? Can you tell which primary colors mixed to make the other colors?



## Max's Coffee Filter Color Mixing



## Did You Know?

When an artist is mixing paint colors there are three primary colors that they use to make all of the other colors.

These colors are red, yellow and blue. When you mix red and yellow you get a secondary color of orange. Yellow and blue paint will make the secondary color of green and red and blue will make violet. Mixing the primary colors with each other in different amounts forms the color wheel. Changing the amount of any of the primary colors you are mixing will produce a change in the final color of the paint.

With the filters your markers are the primary color dyes. As the water moves into the marker, the colors begin to mix creating secondary colors. The colors may look a little pale until the filter has had time to dry.

