

TRY IT AT HOME!

MAGIC MILK



Pour $\frac{1}{2}$ cup of milk into a bowl. Add 2 drops of food coloring in four different areas of the bowl (pretend the bowl is a clock and add the drops at 12:00, 3:00, 6:00 and 9:00). Use four different colors. Dip a toothpick into dishwashing liquid. Stick the dishwashing liquid end of the toothpick into the center of the bowl of milk. What happens?



Milk is mostly a mixture of fat and water. The food coloring mixes easily in the water but not in the fat. So, the more fat in the milk the least mixing occurs. The detergent causes the colors to move because of the way the detergent acts with the fat and the water.



Try the experiment with other kinds of milk (powered, skim, whole, lowfat, soy) and see if you get different results.

