JR-SCIENTISTS

MAGIC MILK

This magic milk science experiment is the perfect kitchen science experiment to help understand the science behind 'surface tension'.

SUPPLIES

Full Fat Milk
Food Coloring
Dawn Dish Soap
Cotton Swabs

INSTRUCTIONS

STEP 1: Start by pouring your milk into a baking dish or another flat bottom surface. Just enough to cover the bottom.

STEP 2: Next you want to fill the top of the milk with drops of color!

STEP 3: Now pour a bit of your dish soap into a bowl, touch your cotton swab tip to the dish soap to coat it. Bring it over to your milk dish and gently touch the surface of the milk with the soapy cotton swab!

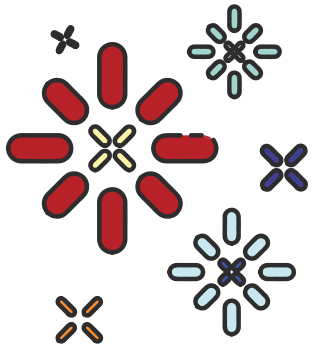
WHAT IS HAPPENING?

Milk is made up of minerals, proteins, and fats. Proteins and fats are susceptible to changes. When the dish soap is added to the milk, those molecules run around and try to attach to the fat molecules in the milk. You wouldn't see this without the food coloring! The food coloring looks like fireworks because it's getting bumped around! The soap heads for the fats creating the cool bursting of color. When there is no more movement, all the fat molecules have been found. Are there any more hiding?


04/30/18
DAWN
SPECIAL VALUE

Magic Milk Observations

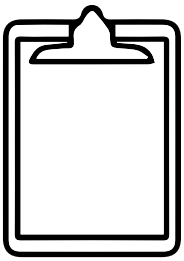
Use this worksheet to process and evaluate your work.



Do you think the temperature of the milk would matter?
Why or why not?

What do you think will happen when you touch the swab to the colors?

Why do you think the colors stop moving eventually?



RECORD

Try the experiment with water. What did you observe?

Try with different types of milk. Was there a difference?
