

Wintery Marbled Milk

SCIENCE ENRICHMENT

SUPPLIES

- * Foil Pie Pans
- * Full Fat Milk
- * Blue Food Coloring
- * Dawn Dish Soap
- * Cotton Swabs
- * Snowman/Snowflake Cookie Cutter



- Fill the bottom of a pie pan with the full fat milk
- Place the cookie cutter in the center of the pan
- Pour some Dawn Dish soap into a separate bowl
- Drop some blue food coloring in several spots outside the cookie cutter
- Dip the cotton swab into the dish soap
- Touch the dipped cotton swab to a droplet of food coloring in the milk

Is it a science enrichment activity if you don't explain the science?

This magic colored milk science projects gets it's burst of color from chemistry...

The science behind the magic milk: The chemistry between the dish soap and the fat in the milk is what makes the magic happen. While some of the dish soap's properties dissolve in the water, the other properties search out the fat of the milk.

Milk is made up of vitamins, minerals, proteins and fats. When the soap is added to the milk is breaks apart the protein and the fats. 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? Try another q-tip dipped in soap!

Turn it into a science experiment: Explore other varieties of milk including reduced fat milk, heavy cream, and even alternative milks!