

## 2020 Summer Reading

# **15-MINUTE SCIENCE EXPERIMENT**

# **Milk Fireworks**

milk (whole milk works best though any milk will do) bowls food coloring or liquid watercolors liquid dish soap q-tips or toothpicks

1. Pour enough milk in the bowl to completely cover the bottom.

2. Put a few drops of color near the middle of the milk.

3. Dip the q-tip or toothpick in the dish soap and poke it in the middle of the colors.

EXTRA--It's an experiment, so let mix things up and see what happens. Do you have different types of milk? Different types of color? Does a toothpick work better than a q-tip? Does the amount of milk matter

#### What's Happening?

Food coloring (and liquid watercolors) will mix with water, but not fat. Dish soap breaks the surface tension of milk, allowing the color molecules to flow more freely. Dish soap will bind to the fat in the milk and create soap-fat molecules that shove the color molecules around the bowl in spectacular designs (aka fireworks!) Sticking the q-tip into the bowl also contributes to the currents of color and milk.



Thank You to the Rotary Club of Attleboro for sponsoring this project



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