LOS ANGELES PUBLIC LIBRARY

STORY HACKERS

STEAM Activity

The Day-Glo Brothers

Tie Dye Milk Experiment

Watch colorful swirls appear in milk, creating bold patterns. The science behind this experiment is something called surface tension, which is on top of the milk. When we add dish soap to the milk, the soap breaks the surface tension. This causes the food coloring to swirl around, creating beautiful patterns. In addition, the dish soap breaks down the fat in the milk. This causes the food coloring molecules to bump around the dish, creating swirls. For this experiment use 2% milk but it would be interesting to see if there is more or less movement if whole milk is used.

Materials:

- Variety of food coloring
- Dish soap
- Q-Tips
- Milk
- Shallow plate

Instructions:

1. Pour the milk into the plate.
2. Add drops of different food coloring onto the milk.
3. Dip the Q-Tip into the dish soap and place in the milk.
4. Watch the food coloring move around, creating a tie-dye look!