



HOME DEMO NO. 9

Marvelous Marbling

This experiment lets you make marbled paper. It can be art, but you need science to make it happen.

What you need:

1. White construction paper
2. Food coloring
3. Aluminum roasting pan
4. Flat baking pan
5. Clear cooking oil
6. Plastic cups
7. Fork

What you do:

1. Set out three plastic cups. Measure one tablespoon of cooking oil and one teaspoon of food coloring into each cup. Beat the mixture with the fork until the food coloring is well mixed. It takes time, about 3 minutes. Use one color, two colors, or more.
2. Fill the aluminum pan with water just a few millimeters deep.
3. Pour some of the food coloring/oil mixture onto different areas of the water in the pan. Watch as the oil spreads out in bursts of color!
4. Lay a piece of the construction paper on top of the water. After thirty seconds or so, carefully lift it off.
5. Hang the marbled paper up with a clothespin and let it dry for a few hours.
6. Now that you've got marbled paper, why not use it to write one of your friends a letter?

What's happening?

Oil floats on water. A barrel of oil weighs less than a barrel of water. That's why oil spills can be so bad for the environment - a little oil quickly spreads out to cover a great big area. It's also why the coloring and oil mixture spreads out in your pan. Then, the coloring sticks to the paper, leaving a swirl of color. How do you think the rocks we call "marble" got marbled?