

Scientific Snowflakes

ADULT SUPERVISION REQUIRED



This experiment demonstrates recrystallization and the fact that the solubility of most solids increases with temperature. This means more of a solid (Borax for this experiment) may be dissolved in hot water than cold water. In the experiment, borax is added to hot water, as the water cools, there is more borax than can be dissolved in the colder water. The borax then crystallizes (becomes crystals) and can be removed from the rest of the liquid, which holds the other compound.

Materials

3 -- 3 inch pipe cleaners

1/4 cup Borax -- DO

NOT EAT

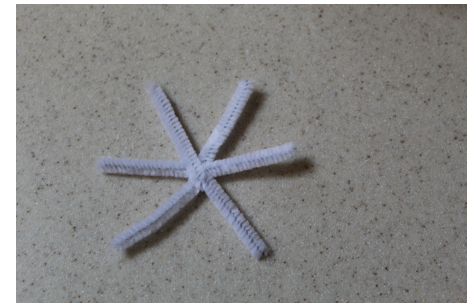
Jar large enough to hold snowflake
so that it does not touch sides

Popsicle stick or pencil

String or another pipe cleaner

Food

Coloring (if desired)



Instructions

1. Start water boiling
2. Twist three 3-inch pieces of pipe cleaner together to form a snowflake.
3. Tie the snowflake with string to a pencil.
4. Add the borax to the jar.
5. Add enough boiling water to cover the snowflake
6. Add one drop of food coloring per 1 cup of boiling water if desired.
7. Hang the snowflake in the jar. Let sit overnight; remove.

