



# Snowflake Lab

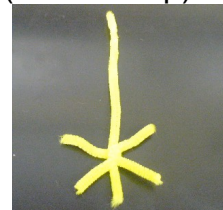


**Do this activity in groups of 3;**  
**Put on lab aprons!**

## **Procedure:**

### **DAY 1:**

- 1) Start to boil 700 mL of water in the 1L beaker on a hot plate.
- 2) GET YOUR STUFF: Get three large plastic cups, three wooden splints, and three pipe cleaners. Put your names on one cup for each person. Put 10 tablespoons (2/3 of a cup) of borax in one small plastic cup.
- 3) Cut your pipe cleaner in half, then cut one of those halves in half again.
- 4) Twist the sections together to form a six-sided snowflake shape with one long arm. Don't worry if an end isn't even, just trim to get the desired shape. The snowflake should fit inside your cup near the bottom.
- 5) Make a "hook" on the long arm of your flake. Use this hook on a wooden splint and hang the snowflake in the cup. The hook should be in the place so that the snowflake hangs near the bottom of the cup but does not touch the bottom or sides of the cup. There is an example at the front of the room.
- 6) Once your water is boiling, turn the hotplate off and slowly dissolve the borax into the hot water with stirring.
- 7) Carefully fill each of the three large plastic cups with about 200 mL of the hot solution. You have a couple of options to accomplish this difficult task. You could hold onto the now empty small plastic cup with tongs and dip the water out of the beaker. Another way would be to hold onto the 1L beaker with beaker tongs and, while it is still sitting on the hotplate, tilt it to pour out the solution into the cups.
- 8) Hang the pipe cleaner snowflake into the cup so that the splint rests on top of the cup and the snowflake is completely covered with liquid and hangs freely (not touching the bottom or sides of the cup).
- 9) Allow the cup to sit undisturbed on the side table overnight.



### **DAY 2:**

Look at the pretty crystals!!! You can spray the snowflake to help preserve it or you can bag it as is. You can hang your snowflake as a decoration on a tree or in a window to catch the sunlight.

