

# CRYSTAL *names*

---



PLAYDOUGH TO PLATO

- Pipe cleaners
- Fishing line {twine or yarn will work too}
- Pencils or wooden skewers

- Scissors
- Glasses or plastic container {one for each color}
- A container large enough to hold letters of name {if doing your name as a single piece written in cursive}
- Borax
- Food Coloring {optional, if you want colored letters you can dye the borax solution or use colored pipe cleaners}
- Liquid measuring cup
- Tablespoon
- Heat Safe Mixing Bowl

## Shaping the Names

Take white pipe cleaners and use them to form the letters of name.

Letters must be able to fit in the container without touching any sides.

Once formed fishing line can be used to suspend each letter a few inches from wooden skewers.

## Making the Solution

Heat a large pot of water which will be used to dissolve the borax. To make each letter a different color, use 5 quart sized plastic containers and measure out 3 tablespoons of borax per cup of hot water.

(Teachers, please handle this portion of the activity, as water should be hot).

Pour 3 cups of almost boiling water into each of the 5 containers. A, Teachers can mix each container with a long wooden spoon until the borax is dissolved. Next, add several drops of food coloring to every container and carefully lower each letter into the color of choice.

# Waiting for the Crystals

Put the containers on a shelf and let them sit overnight. Mostly crystals will begin forming on the sides of the container and also begin settling onto the bottom.

## The Science Behind It

When borax is dissolved in water a suspension is created. A suspension is a mixture that has solid particles {the borax} that are large enough for sedimentation {settling out}. As the borax begins to settle, it starts to crystalize on all the surfaces it comes in contact with – including the pipe cleaner letters. As the borax continues to settle out, it builds crystals on top of other borax crystals creating a thick layer.

This activity was shared through Playdough to Plato on Pinterest and is intended for grades K-4.