



# CRYSTAL NAMES

## Material Needed:

- 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 your 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

## Activity Instructions:

- Take white pipe cleaners and use them to form the letters of your name (make sure it will fit into the plastic container without touching any sides)
  - NOTE: you can do each letter individually or you can connect pipe cleaners and make your name in cursive
- Once finished, use fishing line to suspend each letter a few inches from wooden skewers
- Heat a large pot of water (make sure it's hot enough to dissolve the borax quickly but not hot enough to scald someone)
- Measure out 3 tablespoons of borax per cup of hot water
- Once all the borax is measured, pour 1 cup of hot water per 3 tablespoons of borax, into the container
- Mix each container until the borax dissolves (Add food coloring if you want colored letters)
- Carefully lower each letter (or entire name) into the borax solution
- Next comes the hardest part, waiting! Put the containers on a shelf and let them sit overnight.
- In the morning, pull the letters out of the borax solution and put in a sunny window to see them sparkle

## 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.