

JR-SCIENTISTS

BORAX CRYSTALS

Grow borax crystals overnight for a cool science experiment any rockhound or science enthusiast will love!

INSTRUCTIONS:

STEP 1: Wind a pipe cleaner tightly into a nest shape. Make at least 5 of these.

STEP 2: Tie fishing line to the nest, and the other end of the line to a skewer.

STEP 3: Boil 4 cups of water and stir in 1 $\frac{3}{4}$ cup Borax until it is dissolved. (There should be a bit of undissolved in the bottom)

STEP 4: Pour $\frac{3}{4}$ cup of the mixture into each cup and add food coloring to the cups if desired.

STEP 5: Put one of the pipe cleaner nests into each cup and lay the skewer across the top of the cups so they hang freely.

STEP 6: Leave your nests in the borax solution overnight (or even two nights) until lots of crystals have grown on them!

STEP 7: Remove them from the water and let dry on paper towels.

THE SCIENCE

As your super saturated solution cools down there is suddenly more particles in the water as the molecules move back together. Some of these particles will start to fall out of the suspended state they were once in. The particles will start to settle on the pipe cleaners and form crystals. This is called recrystallization.

SUPPLIES

**8-10 Pipe Cleaners,
assorted colors**

Borax

5 Plastic cups

Food Coloring

Fishing Line

5 Wooden Skewers

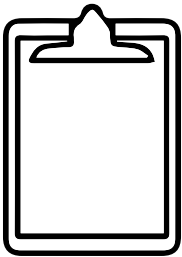
Water



Borax Crystals Observations

Use this worksheet to process and evaluate your work.

What do you think will happen when you combine borax and water?



RECORD

What did you see? Did the end result look like you thought?

Try making two batches, but covering one, not the other. Any difference?

Try making a batch in a glass jar, and one in a plastic one? Any difference?

Try using different materials instead of pipe cleaners. Any differences?
