

## CRYSTAL SEASHELLS

### YOU WILL NEED:

Borax Powder {found by laundry detergent}  
Water  
Measuring Cups and Tablespoon  
Spoon

Glass  
Container or  
coffee mug  
Seashells



### MAKING A SATURATED SOLUTION

The most important part of growing these fun crystal seashells is mixing up a saturated solution. The saturated solution will allow the crystals to form slowly and correctly. A saturated solution is a liquid that is filled with particles until it can no longer hold any more of the solid.

**STEP 1:** Boil Water - As the water heats up the molecules move away from each other allowing the solution to hold more of the borax powder.

**STEP 2:** Add 3-4 Tablespoons of borax powder per 1 cup of water. - When you are mixing the solution, you will still see a tiny bit of the powder floating around and settling to the bottom. That means it's saturated!

**STEP 3:** Place your seashells in glass containers {glass prevents the solution from cooling down to quickly} The seashells should not touch each other.

**STEP 4:** Add the solution to the glass containers and make sure to completely cover the shells.

**STEP 5:** Put it aside and observe what happens.

### THE SCIENCE OF GROWING BORAX CRYSTALS

Crystal seashells is a suspension science experiment. When the borax is mixed with hot water, it remains as solid particles in the water. As the water cools, the particles settle and form the crystals. Pipe cleaners are also popular for growing crystals.

As the solution cools down, the water molecules come back together forcing the particles out of the solution. They land on the nearest surfaces and continually build up to form the perfectly shaped crystals you see. Make sure to take note of whether the borax crystals look the same or different to each other.

If the solution cools down too quickly, the crystals form irregularly because they don't have a chance to reject the impurities that are also contained in the solution. You should try to leave the crystals untouched for about 24 hours.

After 24 hours, you can take the crystal seashells out and let them dry on paper towels. Set up an observation station for the kids to look at the crystals. Have them describe what they look like and even draw them!