



Activity: Grow salt crystals on craft feathers.

Included in this kit:

- * Craft feathers
- * Clothespins
- * Salt



You will need: 3 Mason jars (lids are not needed)

Instructions

*** Adult supervision will be required for handling hot liquids.**

- 1) Make your salt crystal water. Start by filling 3 mason jars with water. Pour that water into a pot and add half of the salt to the same pot. Boil the water until the salt dissolves.
- 2) Keep adding salt until the pot forms a layer of crystallized salt on top of the boiling water. It should look a bit like ice.
- 3) Pour the salty water back into the mason jars. At this point, you'll have a layer of salt in the bottom of the pot. You can leave that out of your jars. They will crystallize just fine without it.
- 4) Grab the end of your feather with a clothespin so you can suspend it over the center of the jar. Dip the feathers into the jars and set them in a sunny window.
- 5) Your crystals will start to form in just a couple of hours. However, for the level of crystal in the photo above, leave the feathers in the water for about three days.

6) After three days, remove the feathers from the water. Let them dry overnight. The next day, your feathers will be encrusted in square salt crystals.



The science of salt crystals is fascinating!

Salt crystals form due to the high concentration of salt in the water. When the water evaporates, the salt has to go somewhere.

When the feather is placed in the water, the salt molecules (Na and Cl) bond together around the feather. Over time, the salt crystals get bigger.

Salt crystals mimic the formation of other crystal structures, which all use ionic bonding (meaning they are inflexible) to form repeating patterns and structures.