Grow Your Own Crystals

A PEDAGOGICAL INTERLUDE · FIELD STUDY PROJECT

PROVENANCE	ASM / Sounding 006 · practices of attunement
TYPE	instruction · field-study guide
MEDIUM	text
WATCH	attunement.study

Crystals are everywhere around us, from salt to snow. They are so common because the word refers to any matter arranged in an ordered form. The units arranged can be molecules, atoms or ions, all much too small to see, but whose arrangement gives crystals their characteristic structure. There are seven categories of crystal structure, called lattices, or space lattices.

Because of this structure, you can grow crystals. When the molecules of the to-be crystal (the *solute*) bump around each other in a liquid (the *solvent*), they tend to stick together (*crystallise*). Other forces pull them back apart, but once in a while two molecules hang on just long enough to attract another, and another, until a structure begins to form (*individuation*). The more solute in the solvent, the faster the crystal comes together. This building is called *nucleation*.

Sugar crystals — ingredients

- 1 cup water
- 3 cups table sugar
- a clean glass jar or cup
- a pencil, clip or butter knife that spans the jar
- a thin wooden pick, string or yarn (not nylon)
- a pan for boiling the water and making the solution
- a spoon for stirring
- optional: food colouring

Directions

1. Tie the pick or string to your pencil, knife, or best of all a clip (two clothes pegs also work). The string should hang into the jar without touching the bottom or sides.
2. In the pan, bring the water to the boil.

3. Stir in the sugar a spoonful at a time. You want plenty of solute (the sugar) in the solution, but not so much that it won’t all dissolve; undissolved sugar makes the crystals build onto those grains rather than your string. For colour, add a few drops of food colouring.
4. Carefully pour the solution into your clean glass jar. Make sure it is clean, or crystals will build on the jar rather than the string.
5. Balance the pencil, knife or clip (with the string tied to it) on the lip of the jar and let it dangle into the solution. Again, don’t let it touch the sides or bottom.
6. Find a safe spot where the jar won’t be knocked or exposed to dust.

Check the next day and notice how they’ve started to take form on the string.

Maintenance

Remove any excess crystals from the surrounding solution. You may need to refresh the solution if it loses its supersaturation. When your crystals are the size you like, or when they stop growing, lift them out and let them dry. Can’t wait to see what grows.

> Or watch crystals grow → attunement.study

Making Crystals, a field-study guide from the *practices of attunement*. Part of *Museum Soundings*, the counter-archive to “Snap, Hiss, Crackle, Pop”.