



SALT CRYSTAL EXPERIMENT

Grow your own crystals at home!

What you'll need:

- ✓ 1/2 cup (120 ml) of tap water or distilled water
- ✓ 1/2 cup (120 ml) of salt (table salt, Epsom salt, or alum salt)
- ✓ One small pan
- ✓ String
- ✓ Pencil or popsicle stick
- ✓ Food coloring dye (optional)
- ✓ A helpful adult

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Directions:

1. Have an adult heat a pan of water just until it begins to bubble.
2. Choose your salt. Different salts produce different crystal results:

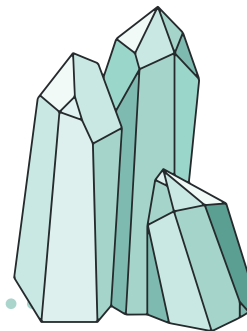


TABLE SALT

Table salt takes a few days to grow. “Iodized salt” won’t work as well, but will still form crystals.

EPSOM SALT

Epsom salt grows into smaller, needle-like crystals and faster than table salt. You can buy it at a pharmacy.

ALUM SALT

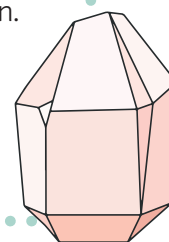
Alum salt grows quickly, sometimes making visible crystals within a few hours. Find it in the spice section of a grocery store.

FOR MY EXPERIMENT, I AM USING _____ SALT.

3. Stir in as much salt as you can. Take the pan off the heat source.
4. Pour in about 1/4–1/2 cup of salt and stir until the water is clear. If you don’t see any salt grains in the water, stir in another spoonful. Keep stirring in salt until you see salt grains that won’t dissolve when stirred.
5. Have your adult slowly pour the hot water onto a clean jar or another clear, heat-safe container. Stop before the salt grains fall into the jar. If there are undissolved salt grains in the jar, the crystals might grow around those grains instead of your string.

6. Optional: Add a couple of drops of food coloring to change the color of the crystals. This might make crystals smaller or lumpier but not by much.
7. Tie a string around a pencil or popsicle stick. The string should have tiny grooves and rough edges so that the salt can latch on. A braided string is ideal instead of a fishing line. The pencil or popsicle stick should be long enough to lie across the top of the jar.
8. Cut the string to the correct size to dangle in the water. Only a portion of the string underneath the water will grow crystals. Cut it short enough to avoid touching the bottom of the jar or the crystal will be lumpy and small.
9. Balance the pencil on top of the glass jar. The string should hang inside the jar and extend into the water. If the pencil won't stay still, tape it against the jar. Try not to have the string touch the side of the jar as it will make smaller and lumpier crystals grow against the side.
10. Move the jar to a safe place where it will be undisturbed.

<p>To grow a lumpy mass of crystals, keep the jar in the sun or a fan blowing near it on the lowest setting. These crystals might stop growing at a small size.</p>	<p>To grow a single, large crystal, keep the jar in a cool shaded place. Keep it on Styrofoam or a similar material to absorb vibrations.</p>	<p>Epsom salt will grow faster in the refrigerator instead of in the sun.</p>
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11. Wait for crystals to form! Epsom and alum salt crystals can start growing within a few hours but could take a couple of days. Table salt takes a day or two to start growing and sometimes up to a week.
12. Check back regularly to see if salt crystals have grown on the string. Once you see little crystals growing on the string, they will usually keep growing bigger over the next couple of weeks. **You can track your experiment in the table below:**

YOUR NAME _____ 'S SALT CRYSTAL EXPERIMENT	
EXPERIMENT NOTES:	
WEEK 1	
WEEK 2	

