

Make Your Own Salt Crystal

This activity was created by Amaris.

Materials

- 1/2 cup of water
- 1/2 cup of salt
- Small pot
- Cloth string (anything but fishing wire)
- Pencil
- Food colouring (optional)
- Clear heat-proof container

Directions

- 1 Heat the water on the stove over medium heat until it just begins to boil.
- 2 Add salt to the pot and stir frequently.
- 3 Keep adding salt until it doesn't dissolve anymore. You should see some grains of salt on the bottom of the pot.
- 4 Pour the solution into a clear container. Make sure none of the grains of salt enter the container.
- 5 Add some food colouring if you want a coloured crystal.
- 6 Tie the string to the pencil and lay the pencil across the top of the container. If the pencil keeps rolling, use some tape to secure it.
- 7 The string should be hanging in the middle of the container and shouldn't touch the bottom or sides.
- 8 Place the container where it won't be disturbed. After 2-7 days, a crystal should form on the string!

How it works:

The hot water is capable of dissolving more salt than water at room temperature, allowing the solution to become supersaturated. When the water cools in the container, the salt begins to precipitate, meaning that it forms back into a solid. The salt collects on the string because its rough surface provides a good place for the salt to stick to.

There are many salt deposits that can be found around the world and even some in the western and southern parts of Canada. These natural deposits usually form around seas or salty bodies of water. The salt forms from the evaporation of the salt water and the eventual cooling of the salt back on land. Many of these salt deposits are continuously forming as the cycle of evaporation repeats.