

JR-SCIENTISTS

SALT CRYSTAL LEAVES

Growing salt crystals is a really fun and easy kitchen science experiment you can do either at home or in the classroom.

INSTRUCTIONS:

STEP 1: Cut out leaf shapes from paper.

STEP 2: Boil 1 cup of water and add enough salt to over-saturate the mixture.

STEP 3: Put the leaves on a plate with space between each one.

STEP 4: Pour a thin layer of saltwater solution over the leaves!

STEP 5: Let your salt crystal leaves sit until the water evaporates.

MAKE SURE TO EXAMINE the leaves along the way and check out the crystal growth!

THE SCIENCE

Water molecules are close together in cold water, but when you heat the water up, the molecules spread away from each other. This is what allows you to add more salt to get that supersaturated solution. It even appears cloudy.

As the solution cools the water molecules start to come back together, the particles of salt in the solution fall out of place and onto the paper. More will connect with the molecules that have already fallen out of the solution to continue the crystal growth.

SUPPLIES

Salt
Pot

Construction paper

Scissors

Plate or Cookie Tray

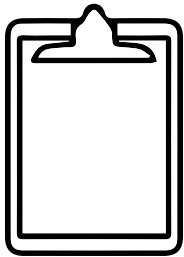


Salt Crystal Leaf Observations

Use this worksheet to process and evaluate your work.



What do you think leaf crystals will look like?



RECORD

How long did it take for all the water to evaporate?

Try the same experiment with cold water instead of hot. Any difference?

What did the crystals look like under a magnifying glass?

What have I learned about salt crystals?
