

Science

Wednesday 20th

January

Dissolving

WALT: investigate solubility

S2S: I can

- Compare soluble and insoluble materials
- Make a saturated salt solution
- Make and record observations over time

Before you start, you will need:

- Clear glass or a jar
- Salt
- Teaspoon
- Pencil (optional)
- String

Today you are going to grow some salt crystals. It is very easy to set up and you should get some amazing results!

You will need to use your knowledge of dissolving and solutions to help you.

Ask an adult to work with you and remember to wash your hands afterwards.

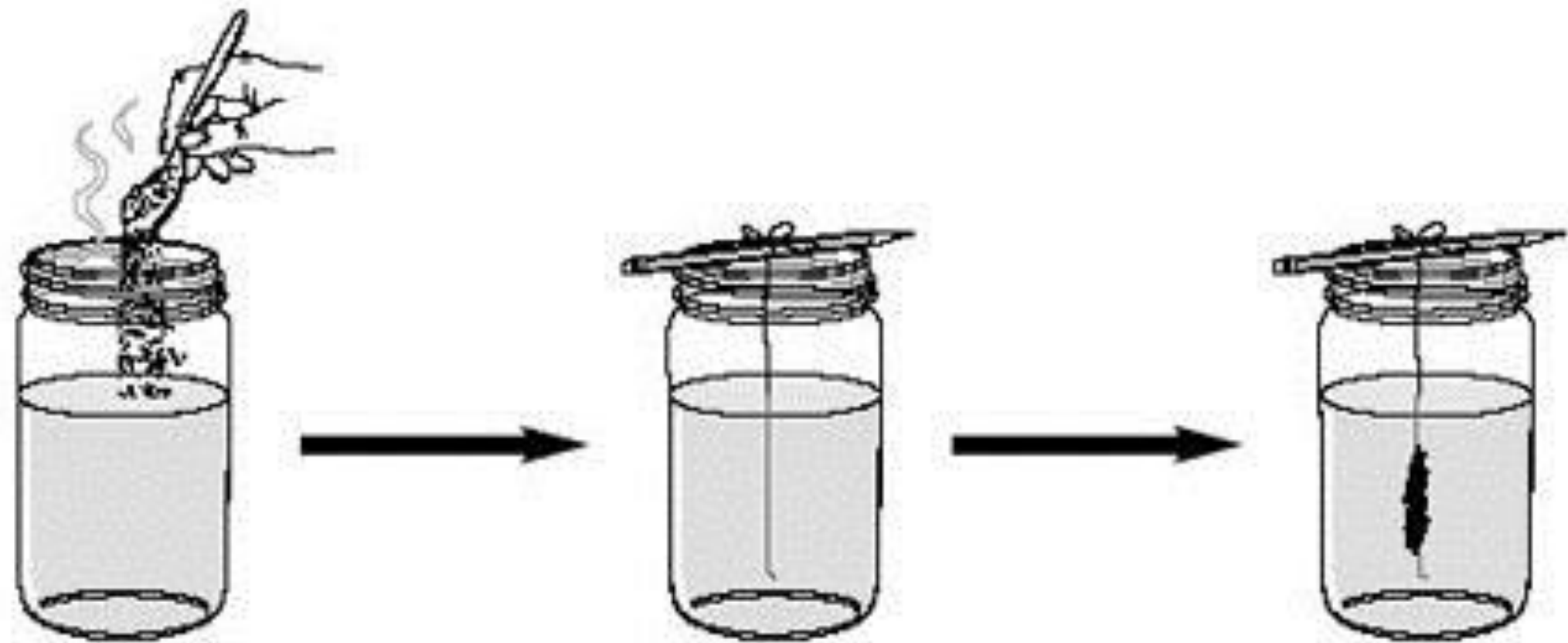
What To Do

Here's what to do:

1. Fill your jar or glass about three quarters full with hot water (please be careful – get an adult to help. The hotter the water, the better).
2. Add several teaspoons of salt to the water and stir until all the salt has dissolved.
3. Continue adding teaspoons of salt until no more salt will dissolve* (you will start to see salt sitting at the bottom of the glass).
4. Tie a piece of string to the middle of the teaspoon or a pencil (make the string long enough so that it will reach down into the water).
5. Lie your spoon or pencil across the top of the glass so that the string dangles into the water. Make sure the string isn't touching the sides or bottom of the glass.
6. Leave your jar somewhere it will not be disturbed and wait for your crystal to grow! You should start to see results in a couple of days.

**SEE THE
NEXT
SLIDE FOR
A
DIAGRAM.**

*When you cannot dissolve any more of material in a solvent, you have made a **saturated solution.**



Once you have set up your salt crystal experiment, you should make daily observations to record any changes you start to see.

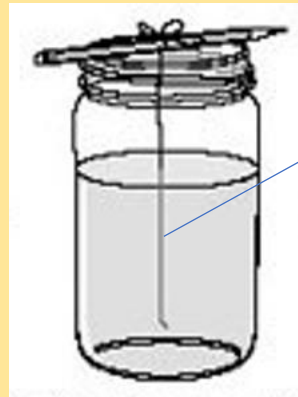
You can be creative about how you record your observations. Here are some ideas:

A table

Day	Observations
1	Some salt still at the bottom of the glass, water clear, nothing on string
2	Water level slightly lower in the glass, no change to the string
3	Etc. etc.

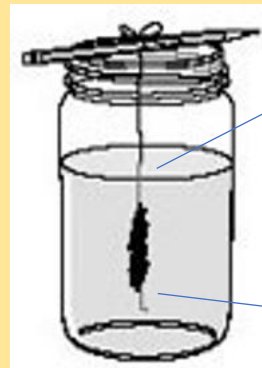
Labelled drawings

Day 1



No visible crystals on string

Day 5



Water level lower by 2mm

Crystals growing around string in the water

Photos



Day 1



Day 5

We will check in with you next Thursday on our Zoom call to see how your crystals are growing and to compare with other people's.

We will ask to see your observations next Thursday too.

Good luck and happy crystal growing!!



Optional Challenge:

If you have enjoyed this activity and would like to try some variations, have a look on the next page...

What will happen if:

- You try to grow crystals with other soluble materials, like sugar?
- You add food colouring to your water?
- You use different amounts of water in the glass?
- You dangle other materials in the glass instead of string, like a pipe cleaner, leaf or feather?
- You try growing crystals in different places in your house or outside?

