# SCIENCE FUN AT HOME



Have some fun at home with these science activities from Science Sparks and the Primary Science Teaching Trust



**BEFORE YOU START!** Please read through this with an adult:

- \* Make sure you have read the 'IMPORTANT NOTICE' on the back of this page.
- If you have a space outside that you can use safely, then you can do the 'Try this outdoors' activity outside. Don't worry if not as you could still do it indoors.
- \* Talk to your adult about sharing the science you have done and if they want to share on social media, please tag @ScienceSparks and @pstt\_whyhow and use #ScienceFromHome

## SALTY SCIENCE

## 1

#### TRY THIS INDOORS .... CRYSTALS

Put about half a litre of warm water into the jug. Stir in a large spoon of salt until you can no longer see all the grains of salt which means they have dissolved. Keep on stirring in salt, a spoon at a time, until you reach the point where no more salt will dissolve. Then pour a small amount onto a flat coloured plate or tray and leave the plate somewhere warm.

#### WHAT DO YOU NOTICE? Things to talk about ...

Over the next few days have a close look at what is happening on the plate. What do you notice? Where do you think the water is going? Can you see the salt again? Does it look the same as the salt that you started with? What is the same about it? What is different about it?

#### You will need

- \* Warm water
- ✤ Salt
- \* Large jug or container
- Several different shaped and sized small containers
- Coloured plastic plate or shallow dish



### **2** TRY THIS OUTDOORS .... EVAPORATING WATER

Take the rest of your salty water and put a small amount into each of your different shaped and sized containers. Try to put the same amount of salty water into each container. Find a sunny place to put the containers close together, or you can find a warm place indoors. Over the next few days, watch to see what happens.

#### WHAT DO YOU NOTICE? Things to talk about ...

What do you notice is happening to the levels of the salty water? Can you see any salt crystals appearing? Which containers do you see salt in first, the tall and thin or the shallow and wide ones?



## 3

#### WHAT IS THE SCIENCE?

Salt dissolves in water. It might look as though it has disappeared but it has actually become mixed in with the water to form a **transparent** (see-through) solution. When the salt solution is left in a container and it dries up to leave new salt crystals, it is because the water has **evaporated**. This happens when some of the water gets enough energy to change from being liquid to a **vapour** (a gas). The water vapour mixes with the air above the water. If it is warm or windy, evaporation happens faster: think about a puddle on a sunny day. Evaporation also happens faster when there is a bigger surface area next to the air, so the water in a shallow, wide container will evaporate faster than the same amount of water in a tall, thin container.

## 4 MORE ACTIVITIES YOU COULD TRY

### FIND OUT MORE ABOUT WHICH SOLIDS WILL DISSOLVE IN WATER <u>https://www.science-sparks.com/exploring-which-solids-dissolve-in-water/</u>

#### GROW YOUR OWN SUGAR CRYSTALS https://www.science-sparks.com/how-to-grow-sugar-crystals/

Join in with THE GREAT SCIENCE SHARE - <u>register</u> for this year's event and take a look at these <u>question maker</u> tools to SHARE YOUR SCIENTIFIC QUESTIONS!

**IMPORTANT NOTICE**: Science Sparks and The Primary Science Teaching Trust are not liable for the actions or activity of any person who uses the information in this resource or in any of the suggested further resources. Science Sparks and The Primary Science Teaching Trust assume no liability with regard to injuries or damage to property that may occur as a result of using the information and carrying out the practical activities contained in this resource or in any of the suggested further resources.

These activities are designed to be carried out by children working with a parent, guardian or other appropriate adult. The adult involved is fully responsible for ensuring that the activities are carried out safely.