

## Let it snow salt crystals!

Get into the festive spirit and let it snow salt crystals with this week's activity!

### Learning aims

- Exploring and experimenting with a range of media through sensory exploration
- Talking about why things happen and how things work.



### Resources

- Different types of salt ½-1 cup
- ½ cup of boiling water (boiling water will be added away from the children)
- Pan and wooden spoon
- Jar
- Cling film
- Pencil (or pipe cleaner) with a string attached (just shorter than the height of the jar).

### Activity outline

1. Boil the water and then pour in about ½ cup of your salt and stir until the water is clear. Keep stirring in more salt until you start to see salt grains that are not dissolving when you stir. This means the water is now a supersaturated solution – it contains more salt than water can normally hold
2. Carefully pour the solution slowly into a clean jar, so nothing interferes with the crystal growth. Stop before the undissolved salt grains fall into the jar, if these fall into the jar the crystals might grow around those grains instead of your string. The solution should not be right to the top of the jar, halfway is just fine
3. Place your pencil with the string attached across the top of the jar so the string dangles in the water, but doesn't touch the bottom of the jar. This is where the crystals will form
4. Tape the pencil to the jar to stop it from moving around whilst your experiment takes place and cover this with cling film to stop anything falling into the jar or the salty solution from evaporating
5. Now place your jar in a safe place to see what crystals grow. The children can take photos of the different stages of the crystal growing and produce a timeline.

## Extending the activity

You can compare the different types of salt and see which crystals you can grow.

- Try placing the jars in different positions with the same salt solution
- See if the speed of the crystal growth or the size of the crystals changes
- Use stopwatches or timers to see how long they take to grow.

For your information

- To grow a large mass of crystals quickly, keep the jar in the sun. These crystals may stop growing at a fairly small size
- If you want a single, large crystal instead of a clump of crystals, keep the jar in a cool, shaded place
- Epsom salts will grow faster in the refrigerator instead of the sun
- Talk to the children about what they think happened to make the crystals. Why do they think they are different?
- Have a look on the internet to see if you can find time-lapse videos of the salt formation.

## Working with Babies

Make your own 'snow' for babies and younger children to explore on large trays on the floor.

## Resources

- 1lb Baking Powder
- Shaving cream (hypoallergenic for sensitive skin if possible)
- A couple of drops of Lavender essential oil.

## Activity outline

1. Put the baking powder onto the tray
2. Spray shaving cream. Use a good handful of it. But you should experiment with it by starting spraying some and then adding as needed
3. Let the children help you to 'knead the snow'. 'The snow' will start forming almost immediately
4. You can add glitter or other smells
5. Encourage the babies to explore the 'snow'.

## Special considerations

*Babies and young children need to be supervised when using sensory materials. Check for any food allergies and ensure you risk assess the experiment.*