

# Colourful ice melt

## Brief summary:

In this activity you will experiment with melting ice using salt and adding colour (paint or food colouring) to the melting ice to create an amazing colour display.

## You will need:

- One or two plastic bowls suitable for freezing
- Water
- Salt
- Watercolour paints or food colouring of different colours
- Small cups or bowls for mixing paints
- Eye dropper
- Help from an adult

## What to do:

**Step 1.** Fill your plastic bowls 3/4 full of water and set in the freezer to freeze completely. While it is freezing you can prepare your colours: if you are using food colouring you can skip this step. If you are using paint, mix a small amount of paint with water in one of your mixing cups. You won't need much. Mix as many colours as you have mixing cups.

**Step 2.** Once completely frozen take the bowls out of the freezer and place on a table or benchtop.

**Step 3.** Experiment with sprinkling a small amount of salt onto the ice (check with an adult before pinching all the salt from the kitchen). What happens? The ice should start melting where the salt meets the ice. Continue adding salt until you have small ravines and holes in the ice.

**Step 4.** Now take your eye dropper and dip it into the paint or food colouring. Drop small amounts of colour onto your ice. What happens? Continue adding as much colour as you like.

NOTE: If it's a sunny day, take your bowls of ice into the sun and look at the interactions between ice, salt and colour in the sun. It can be quite beautiful!



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## Take it further:

- Repeat the experiment using rock salt.
- Repeat the experiment using frozen coloured water (made using food colouring).

Have a look at our other freezing experiments: *Freezing oil and water* and *Which freezes first: hot or cold water?*

## Big questions:

- Does the salt in seawater melt icebergs?
- Where is the North-West Passage? What has changed here in the last few years?
- What animals live in the Arctic? What animals live in the Antarctic?
- How does melted sea ice (icebergs) affect our weather?



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