

Ice and Salt Rainbow

You will need:

- Plastic containers and bowls
- Water
- Salt
- Tray
- Food colouring/liquid watercolours
- Pipette/spoon/paintbrush



1. Fill different sizes and shapes of container or bowl with water and freeze overnight.
2. Remove the ice from the containers and place in a tray. Mix food colouring/paint with water and put aside for now.
3. Sprinkle salt over the ice or leave small piles of salt and watch the ice begin to crack.
4. Using a pipette, spoon or a paintbrush, dot the surface with food colouring/paint. This won't colour the ice – but will highlight the ravines, crevasses and tunnels that form in the ice as the salt melts it.
5. You can add more salt and colouring - or not - explore however you like!

THE SCIENCE

Water turns to ice at 0°C. Ice without salt melts due to the difference in temperature of the ice and the air round it. When you add salt, it dissolves into the water on the surface of the ice. Salt water has a lower freezing point than water so there is a bigger difference between the air temperature and ice. This is why ice with salt melts quicker.