

Ice Cubes

This activity is part science and part art! Do some cool things with ice cubes!

You will need:

An ice cube tray and freezer space

Water

Small safe bits and bobs that will fit into an ice cube tray compartment (e.g. bits of Lego, twigs, small leaf, bits of paper or string)

Food colouring (optional)

Your child

Try these different things to do with ice cubes:

- 1) With your child, fill the ice cube tray with water. Talk about the water – runny, clear, dripping, wet, liquid. Open the freezer for a moment and look at some of the things in there. What does your child notice? Are the things cold, hard, frosty? Put the ice cube tray in the freezer. What does your child think will happen to the water in the tray? How long do they think it will take for the water to freeze? You can check together every so often and talk about the changes happening to the water. Once completely frozen, take the tray out and empty the ice cubes onto a plate. Notice things together: what's happened to the water? What do the ice cubes feel like? Your child might notice that they stick together. Leave the ice cubes on the plate and notice what happens to them. Use lots of language (frozen, ice, cold, hard, solid, melt, slippery).
- 2) Collect some small, safe things that will fit into the ice cube tray compartments. It might be different coloured Lego bricks, some twigs that stick out of each compartment, leaves, a little stone, bits of string. Your child can put one in each compartment, and then together fill the sections with water. Put the tray in the freezer. Do the same thinking and noticing together as in number (1) above. When the water is frozen, take out the tray and tip out the ice cubes. What has happened? Explore together – can you pick a cube up by the twig that sticks out? Can you see the Lego brick/leaf? Can you make a little ice tower with them, or arrange them in a pattern (be careful they are not so cold that they hurt little fingers)? How will you get the things out of the ice cube? Leave the ice cubes and watch what happens.
- 3) If you have some food colouring, together put a little in a jug of water. What happens to the water? Pour this into the ice cube tray compartments. Use the same thinking and noticing together as in number (1) above. Put the ice cube tray in the freezer and wait. When the water is frozen, tip out the ice cubes onto a plate. What has happened? What happens when you leave the cubes? You could try using the coloured cubes to make marks on some paper or card.

Earlier Stages of Development

Find opportunities for your child to play with water: a little on a tray, or outside in some plastic tubs, with spoons or yogurt pots. Hold an ice cube for them and let them touch it – what do they do/how do they react? Make sure you supervise and keep safety in mind.

Extension ideas

Try timing how long it takes for the ice cubes to melt. Does it take more or less time for a plain ice cube or one with a Lego brick in it? Why does the ice cube melt? Can you speed this up? – your child could suggest putting it in the sun or by a warm radiator. What else melts – snow, ice cream?