

# Melting ice experiment

Support children to understand the world around them with this melting ice activity.

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## Learning aims

- To explore cause and effect using ice
- To develop problem solving skills through trial and error
- To explore different temperatures and use descriptive language to talk about experiences.

## Resources

- Frozen ice cubes/shapes
- A tray to hold the ice e.g. fairy cake tray or Tuff Tray
- Salt
- Cold water
- Warm water
- Sugar
- Sand
- Clock/watch
- Sand timer
- Camera to take pictures of the melting ice
- Any other resources that the children have suggested.



## Activity outline

For this activity you can use plain frozen ice cubes.

- Look at a clock/watch and record the start time
- Ask the children to estimate how long they think it will take the ice cubes to melt
- Place your ice cubes into a tray and ask the children for ideas on how they may be able to melt them
  - Encourage their ideas (and gather the resources they would like to try) before you share the resources you have prepared (salt, sugar, cold/warm water etc.)

- Ensure you leave one ice cube that is left untouched so the children can compare
- Support the children to try out their ideas so they can see which substance melts the ice cubes the fastest
  - Provide a camera for the children to take photos at regular intervals of each of the ice cubes so that you can make a project book for your book corner
- Use a sand timer to check on the ice cubes at 5/10/15 minute intervals so the children can observe any changes
- Record the times that each ice cube melts and compare this to the children's earlier predictions
- Record the times in your project book along with the photographs.

### **Extension activity:**

- Provide different sized ice cubes for children to estimate melting times with
- Provide different shaped ice cubes for children to estimate melting times with
- Provide ice cubes with items frozen inside to add interest e.g. small dinosaurs.

### **Working with babies**

Provide ice cubes and/or shapes in a Tuff Tray or water tray for babies to explore. Freeze natural objects such as flowers or leaves into the ice for added interest and sensory exploration.