

# Which freezes first: hot or cold water?

## Brief summary:

In this experiment you will conduct an experiment to find out whether hot or cold water freezes fastest.

## You will need:

- Help from an adult
- Foam cup with cold water
- Foam cup with same amount of very hot tap water
- Freezer
- Clock or timer
- Pen

## What to do:

**Step 1.** Take your two foam cups and label one "hot" and the other "cold".

**Step 2.** Fill one foam cup with cold water and one foam cup with the same amount of very hot tap water.

**Step 3.** Place the cups in the freezer at the same time and start the timer.

**Step 4.** Check the cups every fifteen minutes. Which one freezes first?

## Take it further:

Experiment with freezing different substances such as milk, vinegar, oil, orange juice or saltwater. Which ones freeze the fastest?

Try our other freezing experiments: *Colourful ice melt* and *Freezing oil and water*.

## Big questions:

- Where is Antarctica? Where is the Arctic?
- In what ways are Antarctica and the Arctic different?
- What would happen if all the ice in the sea melted? Would sea levels rise or remain the same?
- What would happen if all the ice on land melted? Would sea levels rise or remain the same?



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