

Ice Cube Fishing

Can you 'fish' for an ice cube? 'Stick' string to ice using only salt!

Ordinary water freezes at 0°C. When you add salt to water, it lowers the water's freezing temperature (that is, it has to get colder than 0°C to freeze).

The salt causes the ice cube to start melting. A little pool of water forms on top of the ice cube and the string sinks into it. As the ice cube melts, it dilutes the salt/water mixture in the little pool; the freezing point starts to go back up again. The ice refreezes, trapping the string. As soon as the ice cube hardens, you can lift it by pulling up gently on the string.

What you need:

- A piece of string about 15 cm (6 inches) long
- Salt ○ A plate ○ Ice cubes

Hands on:

1. Place one ice cube on a plate. Observe the ice cube.
2. Lay one end of the string across the top of the ice cube and sprinkle a bit of salt on it. The string must be touching the ice cube.
3. Count slowly to 10 (or sing a song).
4. Gently lift the string.
5. Presto! You've 'caught' an ice cube.
6. Repeat as many times as you like!

Questions to ask:

- Is ice sticky or slippery? How does it feel?
- Can you pick up the ice cube using the string? Can you catch the ice cube like a fish?
- What made the string stick?

What next?

- Try stacking several ice cubes with salt in between them, to build an ice cube tower.

Hint:

Dry, fuzzy,
skinny string/
wool works
best

Where to next?

INTRODUCTIONS

Stuff That Sticks
Sticky Water

EXPLORATIONS

Velcro

► Ice Cube Fishing

MAKE THIS

Make Your Own Stickers
Window Clings

ALL TOGETHER

Velcro Vests

CONNECTIONS

More Ideas

