

Freeze Fishing



What you need:

- Ice cube
- Salt
- String, about 15cm (6") long
- Plate



What you do:

Step 1: Wet an ice cube and put it on the plate.

Step 2: Wet the string and place it across the top of the ice cube.

Step 3: Sprinkle a little bit of salt on top of the ice cube and the string.

Step 4: Count to five and lift the loose end of the string. The ice cube should come with it!

Step 1:



Step 2:



Step 3:



Step 4:



What's going on:

You're changing the temperature at which water freezes! Adding salt to water makes it stay liquid at colder temperatures. Sometimes you will see salt spread on icy roads. The ice turns back into water where the salt touches it. This only works for a while. The water refreezes when it gets even colder! You added salt to your ice cube and string. The part of the ice cube touching the salt melted into water for a short time. The ice cube was cold enough to refreeze the water. The water froze around the string at the same time! Wetting the ice cube makes this salt-melting reaction happen faster.

Now try this:

Try this experiment with other types of string such as shoelaces or sewing thread. Is there a difference? Which one lets you lift the ice cube the highest off the plate?

