

## Science: Ice fishing

**Ages: All ages**

Hello everyone. Welcome to the fun and inventive world of making STEAM projects in your own home. Hope you are staying warm through the winter. For this cold December, let us try some winter experiments to better understand what is happening around us.



### You will need:

- Cup of water at room temperature
- Medium sized bowl
- Ice cubes
- Salt
- String



**Time:** 15 minutes

**Steps:**

1. Put 5-6 ice cubes into an empty bowl. Then add the water into the bowl.



2. Lay the string on top of the ice. Try to lay the string in such a way that it touches most of the ice cubes in the bowl. Make sure to leave a bit of the string outside the bowl to be able to hold it at the end.



3. Next, carefully sprinkle some salt over the ice cubes and string. Roughly about a pinch of salt is enough.



Now wait for about 30-40 seconds for the magic to happen.

4. After about 40 seconds have passed, carefully pick up the string and watch what happens.



*Tadaaa!! Look at that string of ice cubes.*

## Read World Science: Melting point of ice

When salt is sprinkled over the ice, it lowers the ice's freezing point and causes it to melt. Water around the ice melts and the string then sinks into the ice. Because the ice cubes are surrounded by freezing temperatures, the water around the ice refreezes again quickly. This causes the string to get trapped in the ice cube and the ice reforms around the string. You can then lift up the ice cube as it is stuck to the string.

You know during winter the roads and driveways get all icy and slippery. You might have observed at your home or otherwise adults sprinkling salt. The salt lowers the freezing point of water (which is 0 degree Celsius), causing it to melt so you can remove it easily. Other de-icing chemicals we add to roads can work at much colder temperatures (down to 20 degrees below zero.) **It is science at work, keeping us safe!**



Image credit: weather.com