

Are you looking for something to do to keep your brain active and engaged? We're here to help with Science at Home! You can conduct these fun science experiments using commonly found items. You can also visit us at the Museum's [Science at Home](#) page for additional resources.

## Experiment: Ice Cube Necklace



### Materials Needed:

Ice cubes  
Table salt  
Cotton string  
Water  
Shallow dish or container  
Scissors  
Ruler

### Instructions:



**Step 1:** Place several ice cubes in the container.



**Step 2:** Fill with water just barely until the ice cubes begin to float.



**Step 3:** Cut a length of string about 12 inches long. Soak the string until it is completely wet throughout.



**Step 4:** Lay the wet string across as many ice cubes as you can. **Note:** ensure the string makes a lot of contact with each cube.



**Step 5:** Get a pinch of salt and carefully sprinkle salt all along the length of the string.



**Step 6:** Wait approximately 30 seconds. Then carefully lift one end of the string and see how many cubes remain attached. You've now created your very own ice cube necklace!

### What We've Learned

As a liquid, water molecules are always moving. But as water gets colder, its molecules begin to lose energy and slow down. When this occurs, water molecules link together to form a crystalline structure, or, ice.

When salt dissolves in water it separates into ions of sodium and chlorine. These ions prevent the water molecules from linking up. Even though the water is cold enough to freeze, it remains in liquid form.

The process of salt dissolving in water creates a reaction that takes heat energy away from the surrounding area, which cools it dramatically. The film of water that is slightly further away — and less impacted by the salt — then freezes, trapping the string to the ice cube.



### Having Fun?

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