

INSTRUCTIONS:

01 Put the ice cube on a plate or a bowl.



02 Take the ice cube in your hands.



WHAT DO YOU OBSERVE?

Answer: The ice is slowly melting and goes from a solid state to a liquid state!

WHY IS THE ICE MELTING?

Answer: The ice is melting from the heat released by your hands!

MATERIALS:



An ice cube



A plastic container
(ask an adult for
one that can go in
the freezer)



A saucepan or
a kettle



Water



THE STATES OF WATER

HOW CAN YOU BRING BACK WATER BACK TO ITS SOLID STATE?

- 03 Fill up the plastic container with water, and put it in the freezer for a couple of hours. Water will freeze back to ice, which is water's solid state!



We have observed water in its solid and liquid state. Is it possible to turn water into something else than water or ice?



To assure your safety, it is important to ask an adult to help you during these next few steps!

THE STATES OF WATER

- 04 The adult accompanying you has to put some water to boil, using either a saucepan or a kettle.



Be careful! Boiling water is very hot, it is important to keep a safe distance with it, and not to touch the water nor its container.

WAIT FOR A COUPLE OF MINUTES. WHAT CAN YOU SEE?

Answer: The smoke that comes out of the container is called vapor! It is also called the gaseous phase which is the third form that water can take.

- 05 Let the water boil until you notice that the water level has lowered.



THE STATES OF WATER

WHERE DID THE MISSING WATER GO?

Answer: As the water evaporated, it rose into the air in the form of vapor and thus exited the container!

CONCLUSION:

Water can be found in three different states on Earth:

LIQUID



SOLID



GASEOUS



This is what we call the different states of a matter. It is possible to change something from one state to another, as we just experienced with water! To make it happen, you just need to change the object's temperature. Water at an ambient temperature is liquid, but when it is cold enough, it turns to a solid state, like ice or snow! Finally, when the temperature is higher, the water turns to vapor and is released into the air.