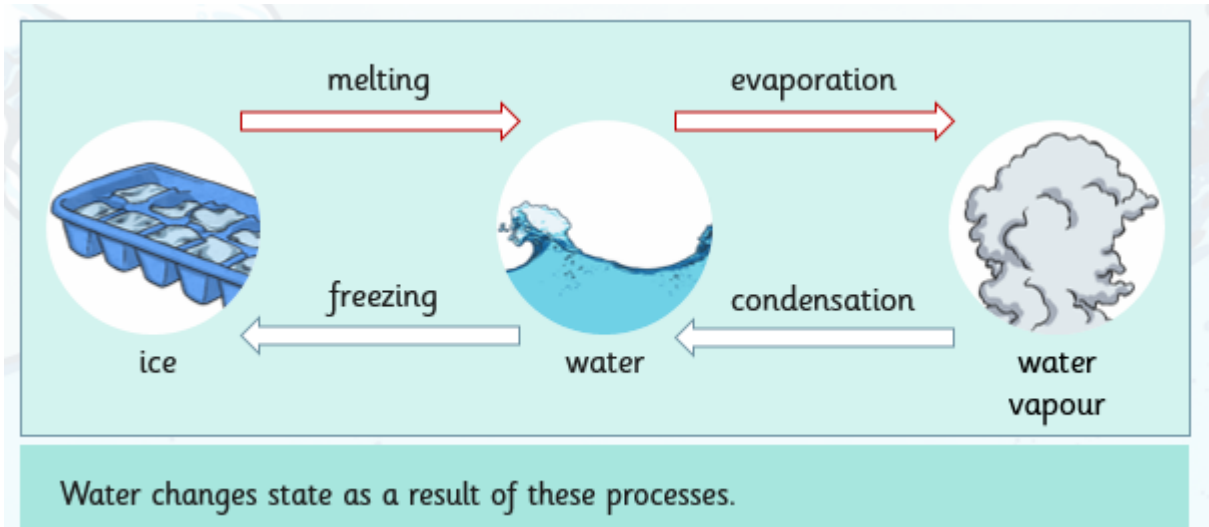


Science

Changing states of matter

- **Recap** what you learned last week about how materials can change states. Can you remember what happened to the chocolate when it was heated up? What happened to it when it was cooled down again in the fridge?
- Look at the image below and discuss what you can see.



- Watch these videos to learn about evaporation and condensation:
http://www.bbc.co.uk/schools/scienceclips/ages/9_10/changing_state.shtml
- Do these practical activities at home to explore how solids, liquids and gases can change state.


Ice Cube Investigation

In this activity, you will place two or three ice cubes on some cling film stretched over a container of warm water.

What do you see in the container?

What can you observe on the cling film?

What processes are occurring?



Science

Changing states of matter

Reversing Changes

Work with an adult for this activity.

Your teacher will boil a kettle. Watch the water vapour form as it boils.

How can this gas be turned back into a liquid?
Can you reverse the change?

Watch your teacher demonstrate this process.

What can you see?

Which processes have you observed?

How has the temperature caused these processes?



For this activity, let your child watch the water vapour come out of the top of the kettle as it boils- evaporation.

Then reverse the process by carefully holding something made from glass or metal close to it. Children should see water droplets form on the surface- condensation.

- **Breathe on to a window or a mirror.** What can you see? Which process can you see occurring? (condensation) Explain what is happening. Is this the same as what happens when you boil the kettle?
- **Turn your shower on to a hot temperature or run a hot bath.** Can you see the water vapour? What is happening here? Can you try to explain it?
- **Find a puddle outside or create one of your own by pouring some water on to the ground.** Observe the changes to it over time. As it shrinks, ask yourself, why did that happen? Can you explain what is happening? (As the sun heats water in a **puddle**, the **puddle** slowly shrinks. The water seems to disappear, but it actually moves into the air as a gas called water vapour. This is an example of **evaporation**.)

Do the short quiz at the bottom of this page and discuss your understanding-

http://www.bbc.co.uk/schools/scienceclips/ages/9_10/changing_state.shtml

Optional activity-

Ask an adult to film you recording a brief explanation of one or more of the demonstrations you did. Present it as though you are teaching the class something new.

You could record what you have learned any way you like, e.g. a fact sheet, a written paragraph or drawings with labels.