

MATTER: THE 3 STATES OF WATER

S4E3: The students will differentiate between the states of water and how they relate to the water cycle and weather

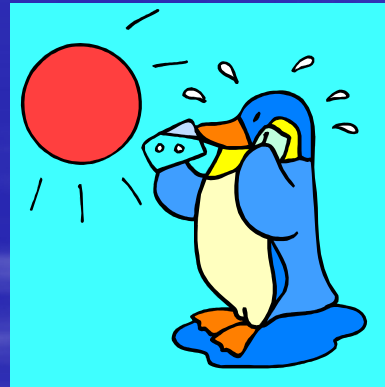
A. Demonstrate how water changes states

B. Identify the temperatures at which water becomes a solid and which water becomes a gas.

Liquid

When we think of water, we usually think of water as a liquid. A liquid will take the shape of whatever container it is in.

We drink liquid water.



We swim in liquid water.



We wash in
water.



Liquid water fills our lakes
and rivers.



Solid

Solids hold their shape.

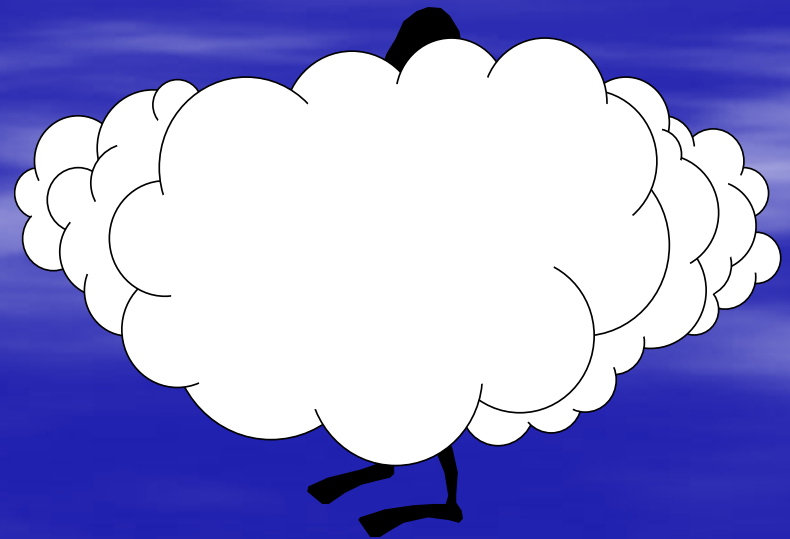


Ice and snow are examples of water in the solid state.

Water vapor

Water vapor is an invisible gas that is always in the air.

Clouds are made of water vapor.



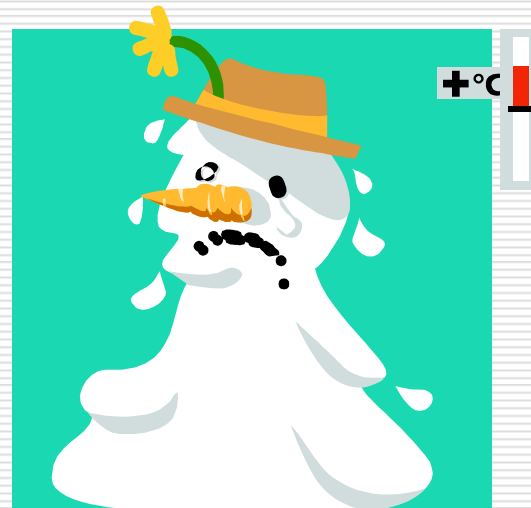
Steam floating up from the sidewalk after the rain or from a hot bowl of soup is water vapor.



CHANGES

Water can change from one state to another by adding or subtracting heat.

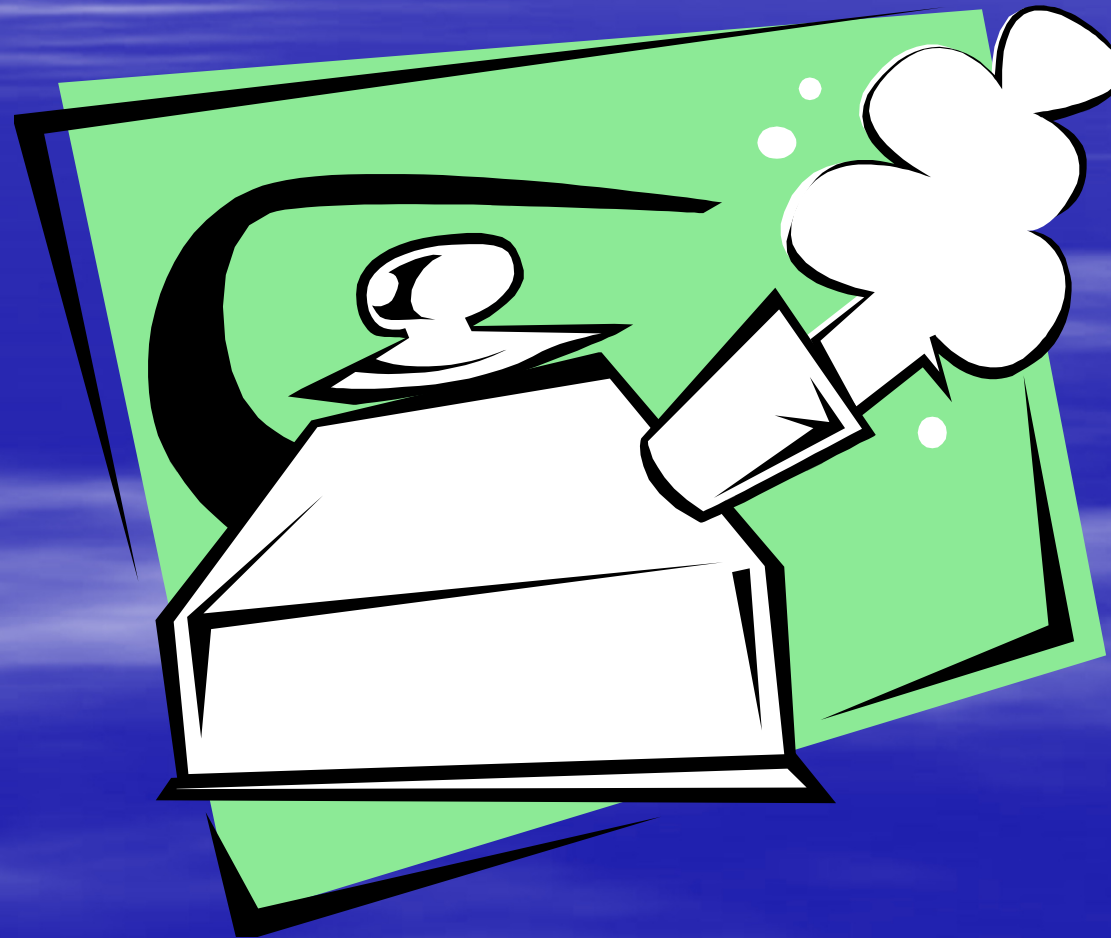
A solid changes to a liquid when heat is added.



A liquid changes to a solid when you take away heat, or it gets colder. This happens at 32° F or 0° C.



- A liquid changes to water vapor when you add heat or it gets warmer. This happens at 212°F or 100°C .



Water in our world.

It's all around us!



And who knows what state
it may be in.