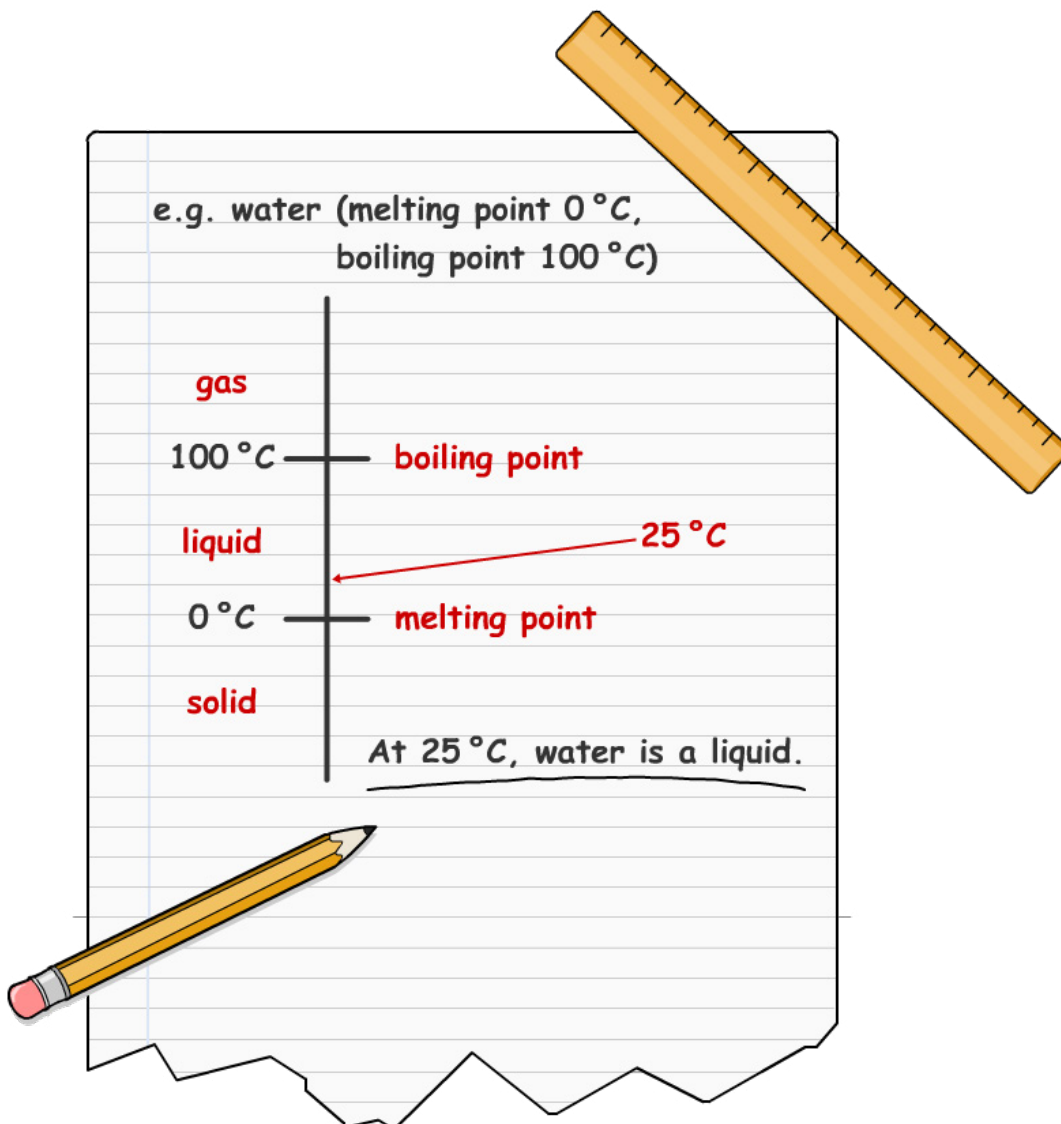


Melting point and boiling water

How to work out what state a substance is, at any given temperature:

- ① Draw a scale.
- ② Write '**solid**' below the melting point, '**liquid**' between the melting and boiling points, and '**gas**' above the boiling point.
- ③ Write down the melting point ($^{\circ}\text{C}$) and boiling point ($^{\circ}\text{C}$) of the substance you are looking at.
- ④ Find the temperature you are looking for on the scale – it should now be clear whether the substance is a solid, a liquid or a gas.



Complete the table below:

Substance	Melting point (°C)	Boiling point (°C)	State at 25°C	State at 50°C	State at 1000°C
Water	0	100			
Methane	-182	-162			
Oxygen	-218	-183			
Ethanol	-117	79			
Ethanoic acid	16.6	118			
Sodium chloride	801	1467			
Xenon	-112	-118			
Iron	1535	2861			
Gold	1063	2856			
Antimony	630	1587			
Mercury	-39	357			
Yttrium	1526	3336			
Ammonia	-77	-33			
Hydrochloric acid	-27	48			
Osmium	3033	5012			