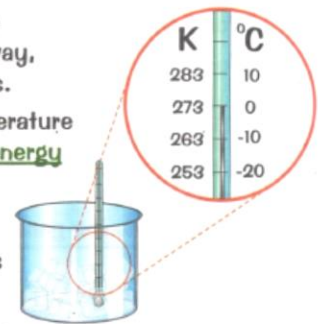


Absolute Zero is as Cold as Stuff Can Get — 0 kelvin

- 1) If you **increase** the **temperature** of something, you give its particles more **energy** — they move about more **quickly** or **vibrate** more. In the same way, if you **cool** a substance down, you're reducing the **energy** of the particles.
- 2) In theory, the **coldest** that anything can ever get is $-273\text{ }^{\circ}\text{C}$ — this temperature is known as **absolute zero**. At absolute zero, the particles have as little **energy** in their **kinetic** stores as it's **possible** to get — they're pretty much still.
- 3) Absolute zero is the start of the **Kelvin** scale of temperature.
- 4) A temperature change of $1\text{ }^{\circ}\text{C}$ is also a change of **1 kelvin**. The two scales are pretty similar — the only difference is where the **zero** occurs.
- 5) To convert from **degrees Celsius to kelvins**, just **add 273**.
And to convert from **kelvins to degrees Celsius**, just **subtract 273**.



	Absolute zero	Freezing point of water	Boiling point of water
Celsius scale	$-273\text{ }^{\circ}\text{C}$	$0\text{ }^{\circ}\text{C}$	$100\text{ }^{\circ}\text{C}$
Kelvin scale	0 K	273 K	373 K

There's no degree symbol when you write a temperature in kelvins. Just write K, not $^{\circ}\text{K}$. OK.