



CHANGING STATES

Properties of Water

Do the experiments. Complete the chart.

	Experiment 1 water	Experiment 2 ice	Experiment 3 water vapour
state (solid/liquid/gas)			
rigidity (rigid/not rigid)			
shape (fixed/not fixed)			
volume (fixed/not fixed)			

Changing State:

Experiment 2: **ice** (solid) → **water** (liquid) **absorption / release** of heat

Experiment 3: **water** (liquid) → **water vapour** (gas) **absorption / release** of heat

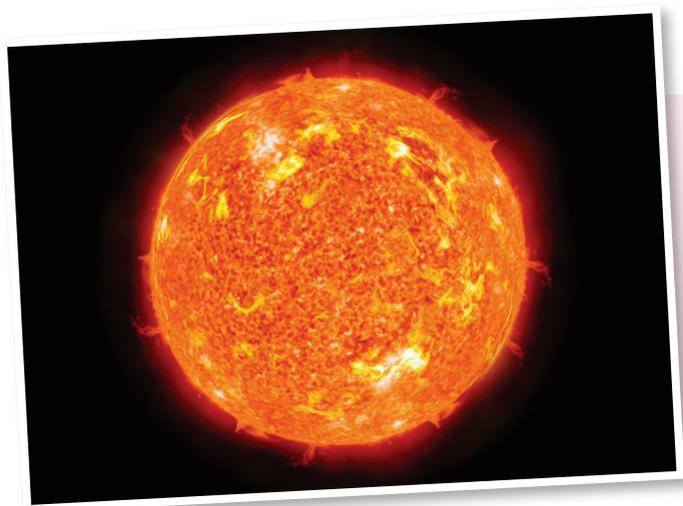
Experiment 4: **water vapour** (gas) → **water** (liquid) **absorption / release** of heat



CHANGING STATES

Plasma: the Fourth State of Matter

As temperature increases, solids become liquids and liquids become gases. But is that it? Not quite! When the temperature is high enough, some gases turn into the fourth state of matter called plasma.



Plasma is formed when a gas is vigorously heated. In nature, we see plasma when lightning strikes. In fact, plasma is everywhere in space, including our sun and other stars.

For practical purposes, we make use of plasma in fluorescent lights. When electricity passes through the gases in the light tubes, the gases heat up and become plasma, which gives off light.

