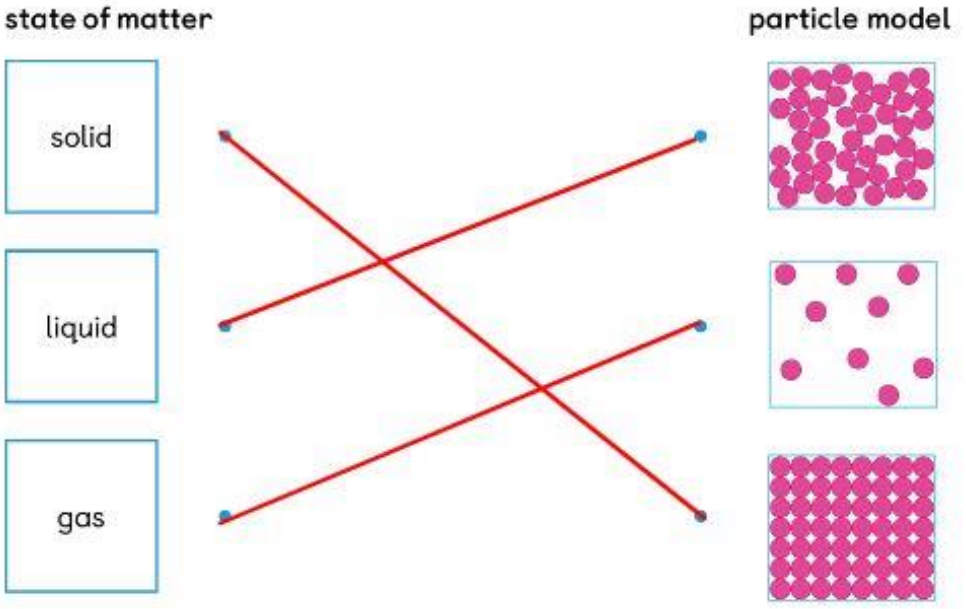
Practice Worksheet

1. Tick (✓) the correct box beside each sentence.

	True	False
Solid particles are packed very tightly together.	☑	☐
Liquids can be compressed since the particles are not packed very closely together.	☐	☑
Particles in gases move freely in random directions.	☑	☐
Evaporation only happens when the surroundings are hot.	☐	☑
Condensation occurs when a gas gains heat and changes into a liquid.	☐	☑
The variable that we measure in an experiment is a dependent variable.	☑	☐

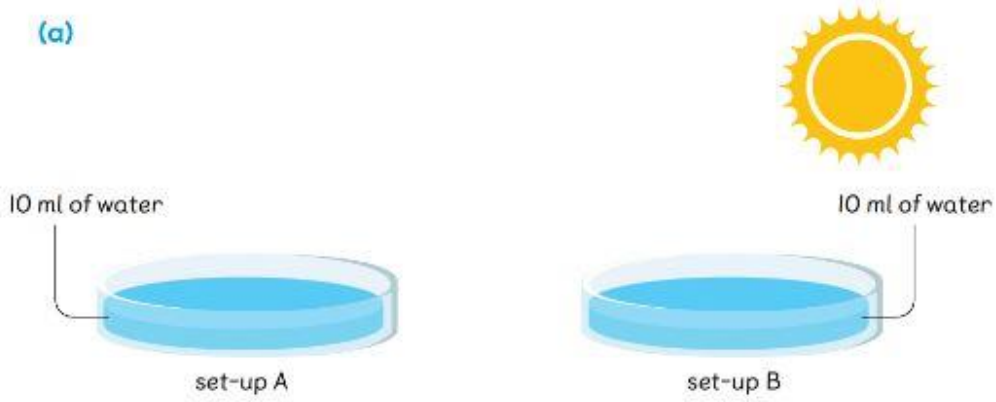
2. Draw lines to match each state of matter to the correct particle model.



3. Gemma carried out two investigations to find out which factors affect the rate of evaporation.

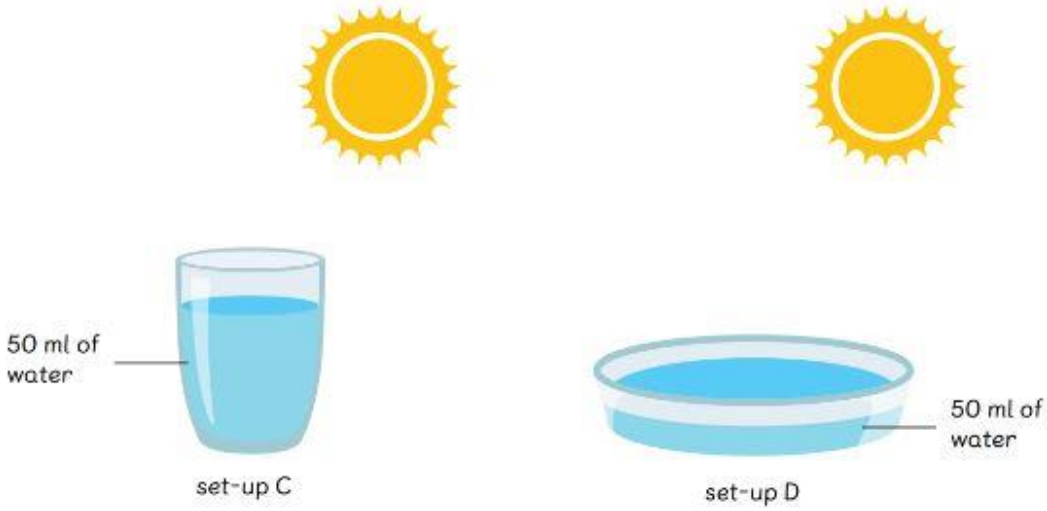
Identify the independent variable in each of the investigations.

(a)



Independent variable: The temperature of the surrounding

(b)



Independent variable: The surface area

4. In the diagram below, arrows **P**, **Q**, **R** and **S** represent processes involving the changes in states of matter.

Identify the arrow that shows each of the following processes.

(a) Evaporation: Q

(b) Condensation: R

Science Words

C

condensation
the process by which a gas loses heat and changes into a liquid

control variable
a factor that is kept the same to ensure that an experiment is fair

D

dependent variable
a factor that is measured in an experiment

E

evaporation
the process by which a liquid gains heat and changes into a gas

G

gaseous
the state of matter in which particles are further apart and move more freely than in the solid and liquid states

I

independent variable
a factor that is investigated in an experiment

R

room temperature
the temperature of the surroundings