

Question	Answer
What is all matter made from?	Particles
Name the three states of matter	Solid, liquid and gas
Which state(s) of matter can be compressed?	Gas
Which state(s) of matter can flow?	Gas and liquid
Which state(s) of matter have a fixed shape?	Solid
Which state(s) of matter have particles that touch?	Solid and liquid
Which state(s) of matter have particles that are in a fixed position?	Solid
Which state(s) of matter have particles that can move past each other?	Liquid and gas
Which state(s) of matter have particles that can move freely in any direction?	Gas
What do you call the process solid → liquid?	Melting
What do you call the process liquid → solid?	Freezing
What do you call the process liquid → gas?	Boiling (or evaporation)
What change in state occurs during condensation?	Gas → liquid
What is the difference between boiling and evaporation?	Boiling only happens at the boiling point and involves bubbles of gas forming inside the liquid. Evaporation happens at all temperatures and involves particles escaping from the surface.
What is diffusion?	The spreading out of particles from a place where there are lots of them to a place where there are less of them
Which two states of matter does diffusion happen in?	Liquids and gases
What two factors affect the speed of diffusion?	Temperature and particle size
What causes gas pressure?	Gas particles hitting the sides of the container
How can gas pressure be increased?	Add more particles or heat up the gas
What are particles made from?	Atoms
What is a pure substance?	A material where all the particles are the same
What is a mixture?	A material made from different types of particles
How can you identify pure substances?	From their melting or boiling points
What is a solution made from?	A solute dissolved in a solvent
Identify the solute in salt water	Salt
Identify the solvent in salt water	Water
What happens to the solute particles when they dissolve?	They separate from each other and mix into the solvent particles
How can you speed up dissolving?	Stir or increase the temperature
Salt is soluble in water, what does this mean?	Salt will dissolve in water
Sand is insoluble in water, what does this mean?	Sand will not dissolve in water
The maximum mass of solute that will dissolve in 100g of water is called its...	Solubility
How can you separate a liquid from an insoluble solid?	Filtration
How can you separate a solute from a solution?	Evaporation
How can you separate a solvent from a solution?	Distillation
How can you separate a mixture of solutes all in the same solution?	Chromatography
Which solutes travel furthest up the chromatography paper?	The ones that are most soluble