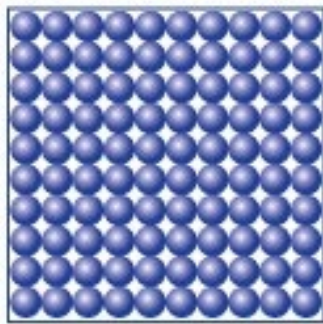
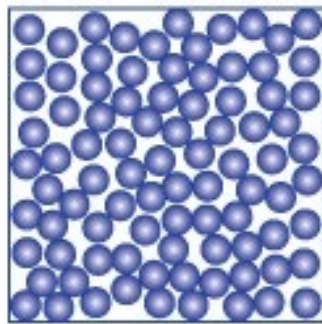


**Matter - Particle Theory KEY LEARNING**

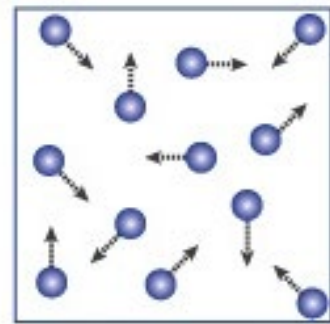
Particles are very small objects like atoms and molecules.



Solid



Liquid

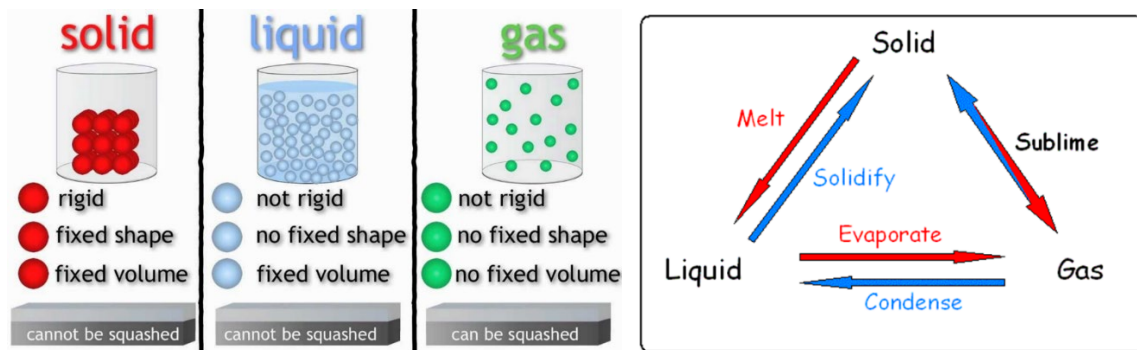


Gas

Particles in a solid are closely spaced and vibrating.

Particles in a liquid are in random motion but in contact.

Particles in a gas are in random motion and widely spaced.



**Matter - Separating Mixtures KEY LEARNING**

Pure means made of one thing.

Mixtures contain more than one thing.



(a) pure substance



pure substance

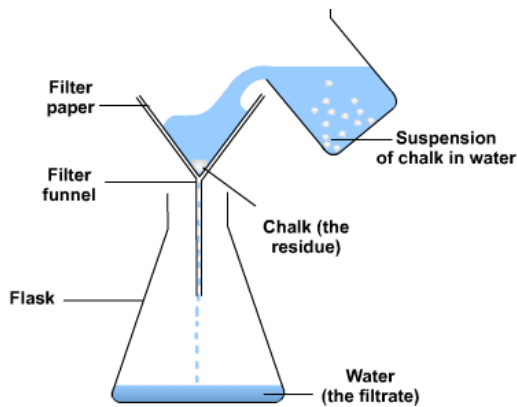
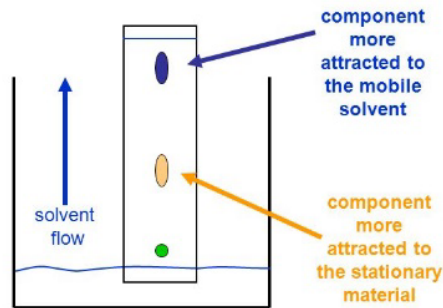


(b) mixture

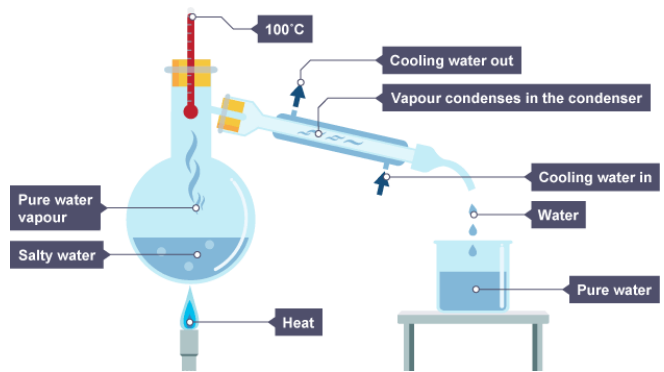
**We separate mixtures to get pure substances.**

**Methods of Separating Mixtures**

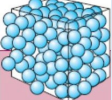
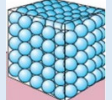
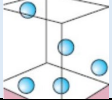
- **Paper chromatography** is a separation method in which the components of a mixture are attracted differently to other substances not in the mixture.

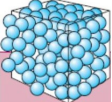
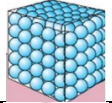
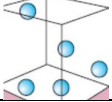


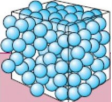
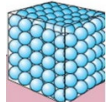
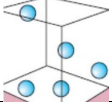
**Filtration**

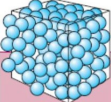
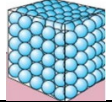
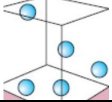


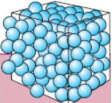
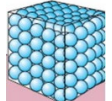
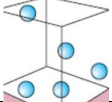
**Distillation**

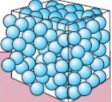
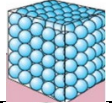
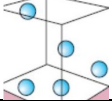
Key Learning Questions		Year 7 Matter
	Is this solid, liquid or gas?	Liquid
	Is this solid, liquid or gas?	Solid
	Is this solid, liquid or gas?	Gas
What word describes something made of one substance only?		Pure.
What word describes something made of more than one substance?		Mixture.

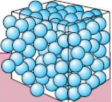
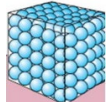
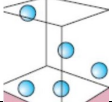
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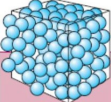
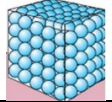
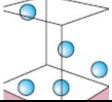
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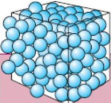
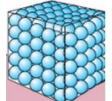
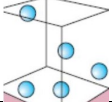
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Are solids, liquids or gases rigid?	
Do solids, liquids or gases have no fixed shape?	
Do solids, liquids or gases have a fixed volume?	
Can solids, liquids or gases be squashed?	
Do solids, liquids or gases have randomly moving particles?	
Solid → Liquid.	
Liquid → Gas.	
Gas → Liquid.	
Liquid → Solid.	
What do we call a liquid that dissolves something?	
What do we call a substance being dissolved?	
What separation method separates inks in a pen?	
What separation method separates sand from water	

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Solid → Liquid.	Melt/Melting
Liquid → Gas.	Evaporate/Evaporating
Gas → Liquid.	Condense/Condensing
Liquid → Solid.	Solidify/Solidifying/Freezing
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What do we call a substance being dissolved?	Solute
What separation method separates inks in a pen?	Chromatography
What separation method separates sand from water	Filtering

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