

Stile

**chromatography**

Mixtures

Stile

**colloid**

Mixtures

Stile

**concentrated**

Mixtures

Stile

**concentration**

Mixtures

Stile

**dilute**

Mixtures

Stile

**dissolving**

Mixtures

Stile

**distillate**

Mixtures

Stile

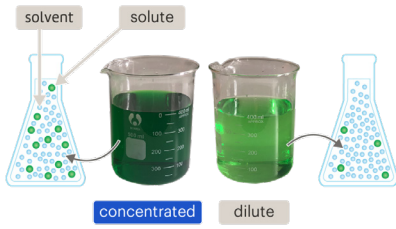
**distillation**

Mixtures

Stile

**emulsion**

Mixtures



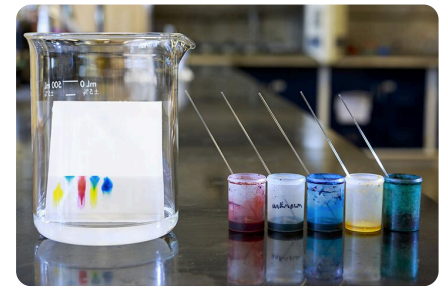
### Having a high concentration

A concentrated solution has a lot of solute compared to the amount of solvent.



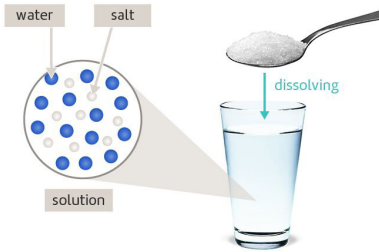
### A type of mixture with suspended particles that do not separate on their own

The particles in a colloid scatter light, making the mixture cloudy instead of transparent.



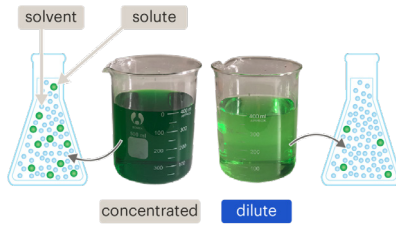
### A technique used to separate substances that move at different speeds

Paper chromatography separates different solutes as they stick to the paper at different points.



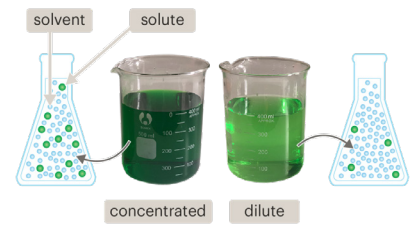
### The mixing of a solid with a liquid to form a solution

Salt dissolves when mixed with water. The salt particles are too small to be seen in the solution.



### Having a low concentration

A dilute solution has a small amount of solute compared to the amount of solvent.



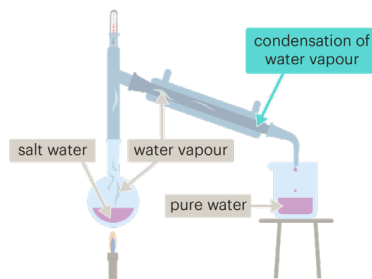
### The amount of solute dissolved in a certain amount of a solution

A solution with a small proportion of solute compared to solvent has a low concentration and is dilute.



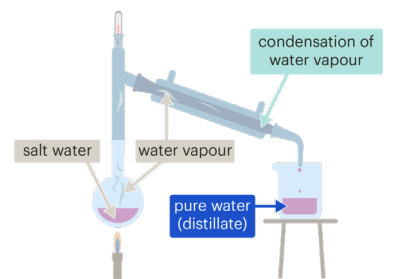
### A mixture where liquid droplets are suspended in another liquid

Butter is an emulsion made up of water droplets mixed in oil.



### A technique used to recover a liquid from a solution

Distillation separates pure water from a salt water mixture by evaporating then condensing it.



### The liquid that is separated out by distillation

When a salt water mixture is separated by distillation, the distillate is the pure water.

Stile

Stile

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**evaporation**

**filtrate**

**filtration**

Mixtures

Mixtures

Mixtures

Stile

Stile

Stile

**flotation**

**insoluble**

**liquid**

Mixtures

Mixtures

Mixtures

Stile

Stile

Stile

**mixture**

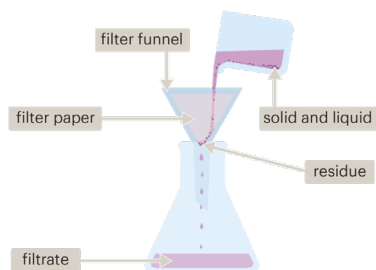
**particle**

**proportion**

Mixtures

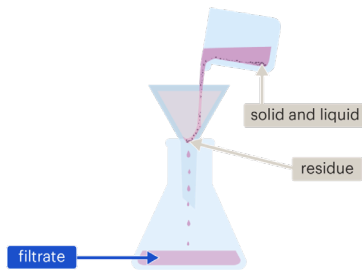
Mixtures

Mixtures



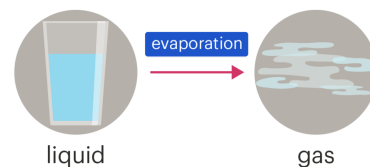
### A technique used to separate insoluble solids from liquids

Chalk can be separated from water using filtration, as the chalk is trapped by the filter.



### The liquid that passes through a filter

Water is collected as the filtrate when a mixture of sand and water is poured through a filter.



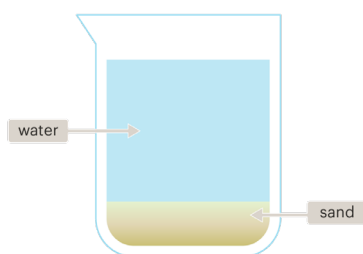
### A change of state from liquid to gas

Evaporating the solvent from a solution increases the concentration of the solute.



### A substance with a fixed volume that flows and changes shape

Liquids take the shape of the bottom of their container.



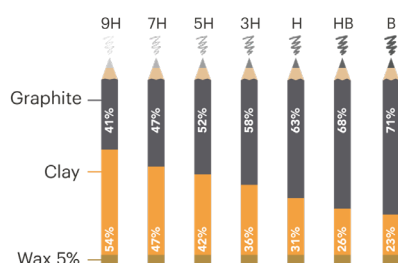
### Unable to be dissolved

Sand is insoluble in water. When sand and water are mixed, they form a suspension.



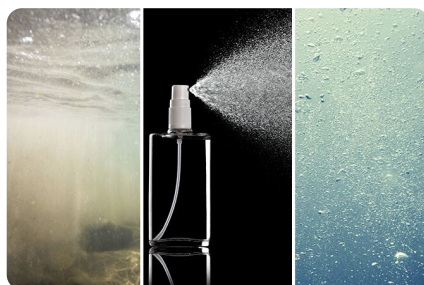
### A technique used to separate a substance that floats on another

The less dense part of a mixture floats and can be skimmed off into a separate container.



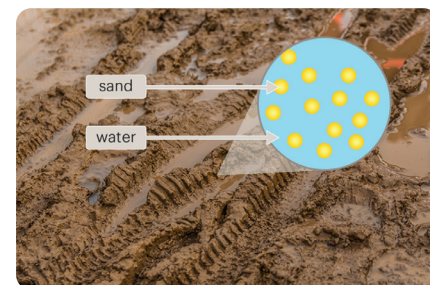
### The amount of one thing relative to the amount of another thing

The proportions of wax, graphite and clay in a pencil lead determine its properties, such as hardness and blackness.



### A solid fragment, liquid droplet or gas bubble

Particle size helps to determine if a mixture will separate into its components or stay mixed.



### A combination of substances that can be physically separated

The three types of mixture are suspensions, colloids and solutions.

Stile

**pure  
substance**

Mixtures

Stile

**residue**

Mixtures

Stile

**saturated**

Mixtures

Stile

**saturation**

Mixtures

Stile

**sediment**

Mixtures

Stile

**soluble**

Mixtures

Stile

**solubility**

Mixtures

Stile

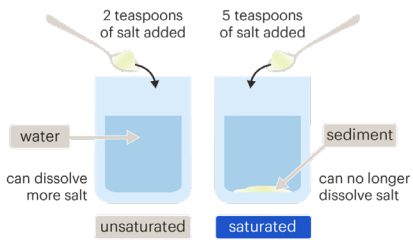
**solute**

Mixtures

Stile

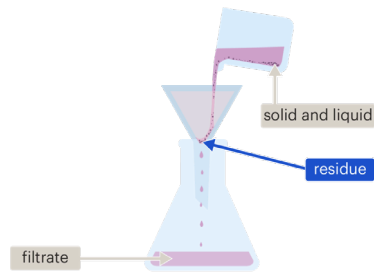
**solution**

Mixtures



### Unable to dissolve any more solute

When a solution is saturated, any more added solute will sink to the bottom as sediment.



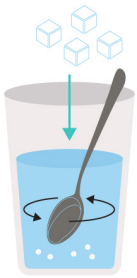
### The solid that gets trapped by a filter

Sand is collected as residue when a mixture of sand and water is poured through a filter.



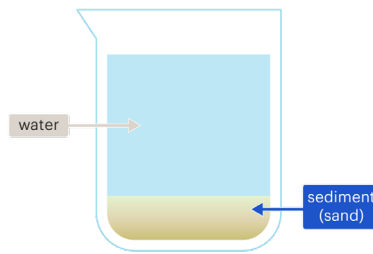
### A substance that is made up of only one type of stuff

Examples of pure substances include purified water, oxygen, gold and table salt.



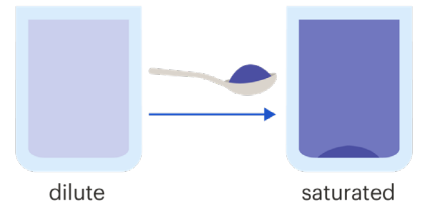
### Able to be dissolved

Sugar is soluble in water. When sugar dissolves in water it forms a solution.



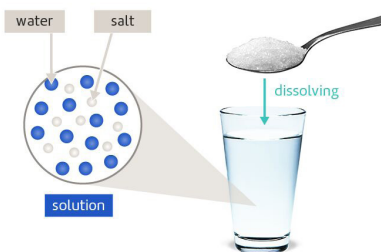
### Solid particles that have settled out of a suspension

Sediment settles when there is not enough motion to keep the particles held up.



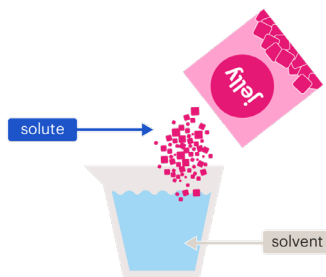
### Increasing the concentration of a solution until it becomes saturated

To saturate a solution you can either add more solute or evaporate the solvent.



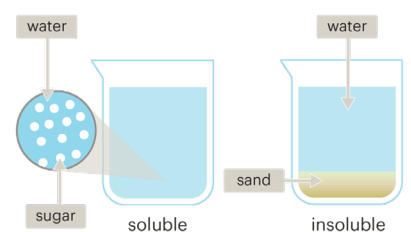
### A type of mixture made of one substance dissolved in another

Solutions are transparent because the dissolved particles are so tiny that they do not scatter light.



### A substance that dissolves in another substance

Colloids are an example of mixtures that are cloudy.



### A measure of how easily one substance dissolves in another substance

Some substances are very soluble in water, such as sugar, while others are insoluble, such as sand.

Stile

**solvent**

Mixtures

Stile

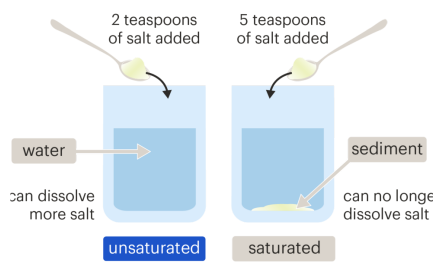
**suspension**

Mixtures

Stile

**unsaturated**

Mixtures



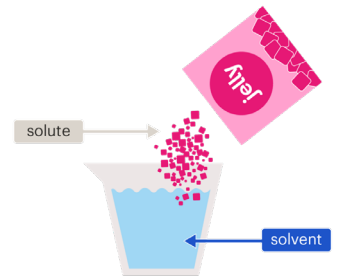
### Able to dissolve more solute

To increase the concentration of an unsaturated solution, either add more solute or remove some solvent.



### A type of mixture with suspended particles that settle and separate over time

Motion is required to keep the components of a suspension mixed together.



### A substance that another substance dissolves in

Water is an example of a solvent. Solutes, such as jelly crystals, dissolve in it to form solutions.