

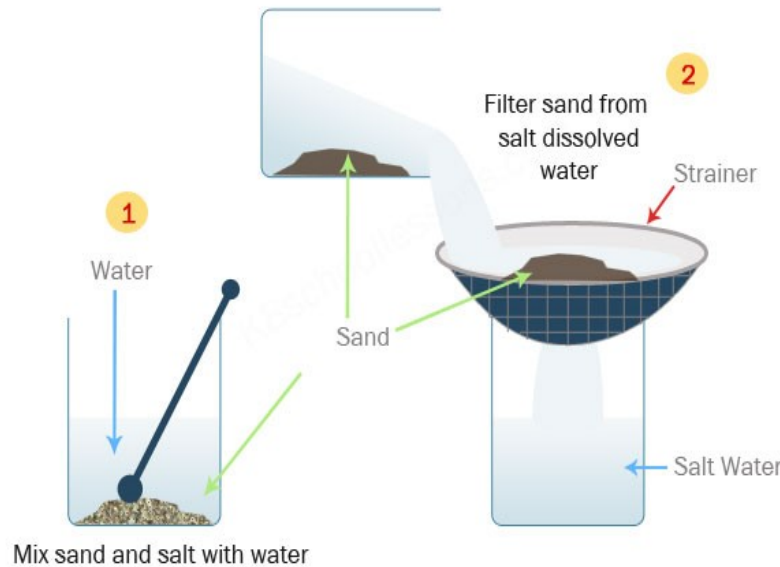
Highwood School—Year 5—Spring 1-Properties and Materials



Property	Definition
Hard	Difficult to scratch, like the head of a hammer.
Soft	Easy to shape, like fabric.
Soluble	Can be dissolved, like coffee granules.
Insoluble	Cannot be dissolved, like pebbles.
Transparent	See through, like glass.
Opaque	Not see through, like a wooden door.
Electrical conductor	Lets electricity pass through easily, like copper wire.
Electrical insulator	Do not let electricity flow through easily, like plastic or rubber.
Thermal conductor	Lets heat pass through easily, like a metal kettle.
Thermal Insulator	Does not let heat pass through easily, like a wood pan handle.
Magnetic	Is attracted to a magnet, like a steel spoon.
Not magnetic	Is not attracted to a magnet, like a wooden spoon.

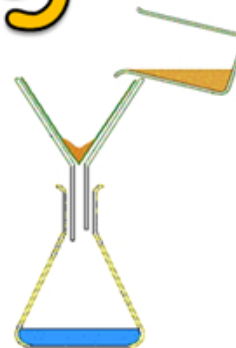
Key Vocabulary

Materials, mixture, solution, sieving, filtering, evaporation, separating, soluble, dissolve



Filtering

A mixture of water and a solid like sand can be separated by filtering. The mixture of sand and water is poured into the filter funnel, which is lined with filter paper. The water can pass through the paper to collect in the beaker. The sand particles cannot pass through the filter paper and instead collect in the filter funnel.



Process	Definition
A mixture	Where substances are mixed together, but dissolving hasn't taken place. For example, mixing, cucumber slices, egg slices and tomato slices to make a salad.
A solution	Some substances dissolve in a liquid. When this happens the liquid is called a solution. For example, when gravy granules dissolve in water, this is a solution.
We can separate a mixture by sieving and/or filtering	<p>Sieving - sorting out the big bits from the small bits, e.g. stones from soil.</p> <p>Filtering - separating solid bits from a liquid, e.g. sand from sand and water.</p>
We can separate a solution by evaporation	<p>As the soluble substance is too mixed into the water, it can't be removed by sieving or filtering.</p> <p>Evaporation - A liquid evaporates into a gas when it is heated. This removes the liquid and leaves the substance behind.</p>