

Year 5 Science Knowledge Organiser - Materials

Key Information

Thermal insulators keep hot things hot and cold things cold.

Mixtures can be separated by sieving, filtering or magnetism.

The speed of evaporation increases with heat.

Solutions can be separated by evaporation.

Misconceptions

Some people think that all metals are magnetic but only iron, steel, nickel and cobalt are magnetic.

Some people think that when a solid dissolves it has disappeared but it is still there, you just can't see it!

Some people think that melting and dissolving are the same thing but melting needs heat and only needs one material whereas dissolving involves more than one substance.

Some people think that thermal insulators only keep things warm, but they actually keep hot things hot and cold things cold as the heat doesn't pass through materials very well.

Vocabulary

material	what something is made from.
mixture	2 or more particles in a mix.
sieving	separates solid components by size.
filtering	separates an insoluble solid from a liquid.
evaporation	separates a soluble solid from a liquid in a solution.
soluble	will dissolve in water.
insoluble	will not dissolve in water.
dissolve	when a solid dissolves in a liquid and it can't be seen.
solution	what is made when a solid dissolves into a liquid.
irreversible change	when a new compound is formed by chemical reaction and the change is not reversible.
reversible change	physical changes which can be undone or reversed.
freezing	When a liquid turns to a solid.
melting	When a solid turns to a liquid.
thermal conductor	Lets heat pass through easily.
thermal insulator	Does not let heat pass through easily.

