



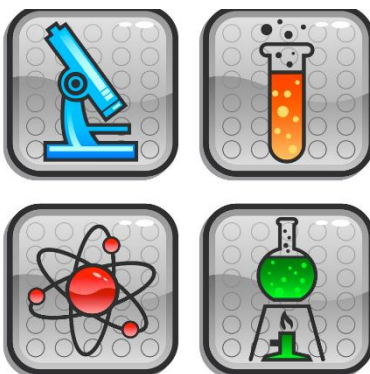
# Year 5 Properties and changes of Materials: Sticky Knowledge Mat



Autumn 2

## Exciting websites

RSC- Royal Society of Chemistry  
 BBC Bitesize and Terrific Scientific  
 Explorify



## Important Bits

- Know what a reversible change is.
- Know what an irreversible change is.
- Give examples of reversible and irreversible changes.
- Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.

## Sticky Knowledge about Materials

- Irreversible changes, like burning, cannot be undone. For example, when vinegar and bicarbonate of soda are mixed.
- Reversible changes, like melting and dissolving, can be changed back again.
- Mixtures can be separated out by methods like filtering and evaporating.
- Mixing substances can cause an irreversible change
- Materials have different properties such as conductivity and transparency etc which make them suitable or unsuitable for purpose.

## Subject Specific Vocabulary

<b>Solution</b>	A liquid in which a solid substance has been dissolved
<b>evaporation</b>	Is the process of a substance in a liquid state changing to a gaseous state due to an increase in temperature and/or pressure.
<b>filtering</b>	to pass through a device which is designed to remove certain particles contained in it.
<b>properties</b>	Characteristics of different materials that make them suitable for purpose.
<b>separate</b>	to break into parts or to keep apart.
<b>dissolve</b>	Breaking down of a material in to tiny particles to make a solution
<b>sieving</b>	To separate a powder or a liquid by passing it through a sieve
<b>mixing</b>	Combining substances that do not dissolve