

Year 5: Science Properties and Changes Of Materials Knowledge Mat

Subject Specific Vocabulary	Information	Important knowledge
solubility	A substance is soluble if the solute (e.g. salt) can dissolve in the solvent (e.g. water) to form a solution.	
reversible/ irreversible	A reversible change can be undone but an irreversible change cannot: a new material is formed.	<ul style="list-style-type: none"> <input type="checkbox"/> I know what reversible and irreversible changes are and give examples of them. <input type="checkbox"/> I can produce my own hardness scale and link the hardness of materials to their use. <input type="checkbox"/> I can classify materials as transparent, translucent or opaque. <input type="checkbox"/> I know the terms conductor and insulator and state which types of material make the best ones. <input type="checkbox"/> I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution. <input type="checkbox"/> I know some of the signs that tell a chemical reaction has occurred. <input type="checkbox"/> I can classify substances as acids, alkalis or neutral' <input type="checkbox"/> I can separate mixtures through filtering, sieving and evaporating.
transparency	The quality of being easily seen through.	
filter	A way of removing solid particles from a liquid or gas.	
dissolve	To dissolve is defined as to become broken up or absorbed by something or to disappear into something else.	
acid	A substance which turns litmus paper red (cabbage indicator: red or pink). They can be extremely dangerous. Diluted acids have a sharp or sour taste. E.g., vinegar, lemon, and fizzy drinks.	
alkali	A substance which turns litmus paper blue (cabbage indicator: green/yellow). They can be extremely dangerous. Diluted alkalis have a soapy feel. E.g., toothpaste, oven cleaner, and baking powder.	<ul style="list-style-type: none"> <input type="checkbox"/> I know how to record data using a table to present my results. <input type="checkbox"/> I know how to take measurements, using a range of scientific equipment. <input type="checkbox"/> I know how to begin to plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary <input type="checkbox"/> I know how to make my own decisions about what equipment is most suitable. <input type="checkbox"/> I know how to use scientific diagrams and labels to record data and support my conclusion. <input type="checkbox"/> I know how to carry out a scientific enquiry, make accurate observations and report my findings.
separate	To divide a mixture into two or more distinct substances.	
thermal	Something that is hot, retains heat, or has a warming effect.	
evaporation	Evaporation is the process by which a liquid turns into a gas.	

