Science Knowledge Organiser Year 5- Materials and their properties

Question for Learning: **Are the changes that happen around us reversible or non-reversible** **Key learning;** • Some materials, when heated or cooled, or when they interact with other materials, change state. By reversing the conditions or separating the mixture of materials, the original substances can be recovered. These are known as reversible changes. • Other materials, when heated or brought together, will react and produce new materials as products of the reaction. These are known as irreversible changes.	 Grouping and Classifying
Question for Learning: **What happens when we mix liquids and solids?** **Key learning;** • When a substance dissolves, it disappears into a liquid. This means it is soluble. • Insoluble substances either settle to the bottom of the container or those made of small particles may remain floating in the liquid forming what is called a suspension, thus making the liquid cloudy.	 Grouping and classifying
Question for Learning: **What makes a difference to how fast sugar or salt dissolves?** **Key learning;** • The time taken for a solid to dissolve depends on several variables including: the size and shape of the pieces (small granular forms dissolve faster than in 'lumps'); the amount of stirring; and the temperature of the liquid (usually an increase in temperature increases the rate).	 Comparative and fair testing
Question for Learning: **How can we get drinkable water from seawater?** **Key learning;** • Evaporation is the process of turning water into water vapour. • Condensation is a process turning water vapour or gas into liquid The droplets on a steamy window are water.	 Observation overtime

Key Words

Dissolved	When a substance dissolves, it might look like it has disappeared, but in fact it has just mixed with the water to make a transparent (see-through) liquid called a solution.
Separating	To set apart parts of a mixture and get the original materials back again.
Evaporation	The process of turning water into water vapour.
Properties	All materials have properties. This means the things about them you ca measure that can be different to other materials.