Science - Materials Knowledge Mat

Sticky Knowledge- What do I need to know?	
Week 1	I can give examples of solids, liquids and gases and describe their properties.
Week 2	I can compare and group together everyday materials on the basis of their properties, including their hardness, permeability, transparency, flexibility and response to magnets
Week 3	I can explain what thermal conductors and insulators and give examples of each. I can give reasons for the uses of them.
Week 4	I can investigate which electrical conductors make a bulb shine the brightest and identify electrical conductors and insulators.
Week 5	I know that some materials will dissolve in liquid to form a solution, and can describe how to recover a substance from a solution.
Week 6	I can use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
Week 7	I know that dissolving, mixing and changes of state are reversible changes.

Key Vocabulary- What words do I need to know and understand?	
solubility	The ability to dissolve into (become a part of) another substance. Something that dissolves, like sugar in, is called a solute. The substance that it dissolves into, like the tea, is called the solvent. When a solute dissolves into the solvent, the end product is called a solution.
permeability	A material which allows water or liquids to flow through.
transparency	If an object or material is transparent, it means light completely passes through it, and you can see clearly through it.
evaporating	When a liquid changes into a gas.
filtering	To filter a substance means to pass it through a device which is designed to remove certain particles contained within.
separate	Separate, part, and divide mean to break into parts or to keep apart.
dissolving	Some substances dissolve when you mix them with water. 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.