## **Year 5: Material World**

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Subject Specific Vocabulary		
dissolve	When a solid mixes with a liquid to make a solution. There is no solid left.	
elastic	Returns to its original shape when force removed.	
electrical conductor	Material that allows electricity to flow through it.	
evaporate	Heat liquid until it turns into gas.	┦.
filter	Use porous material to separate solids and liquids.	
flexible	Easily bends; opposite of rigid and stiff.	
hard	Resistant to scratching or pressure.	7
insoluble	When something can't dissolve.	┦.
mixture	Two or more substances that can be separated.	
plastic	Retains new shape when force is removed.	
rigid	Hard and fixed; not flexible.	
soluble	When something can dissolve.	
solute	The material that dissolves.	
solution	Mixture of solid and liquid (you might not be able to see the solid).	
solvent	Usually a liquid that does the dissolving.	
strong	Resistant to tearing.	
thermal conductor	Heat travels quickly through thermal conductors.	
thermal insulator	Does not let heat travel through easily.	
tough	Resists cracking; opposite to brittle.	

## Working Scientifically

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.
- Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs.
- Use test results to make predictions to set up further comparative and fair tests.
- Report and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations. Identify scientific evidence that has been used to support or refute ideas or arguments.



## **Conductors and Insulators**

	Good Conductors allow energy to pass through	Insulators step or slow down energy
Electrical	Metals e.g. copper, silver, geld, iron, steel, claminum top water	rubber wood plastic plast plas
Thermal	Metals e.g. copper, silver, gold, iron, steel, aluminum	plastic wood rubber fabric polystyrene

## By the end of this unit, I will know:

A mixture contains more than one substance which are not chemically joined. They are easy to separate using their properties.

Mixtures can be any combinations of solids liquids and gases.

A substance may dissolve in one liquid but not in another.

A solution is usually transparent, even if it's coloured.

When a solid is added to water, the water particles surround the solid edges. If the attraction between the water and solid particles, is greater than that between the solid particles then it will dissolve.

Dissolving is affected by things like temperature and the amount of solid. There is always a limit to how much solid can dissolve in a given amount of water.

Our famous scientists for the term are:

Marie Curie and Dmitri Mendeleev



