







Year 5 - Properties of Materials - Half Term 6

Properties of Materials

conducts energy	
insulates energy	
transparent	
waterproof	
durable (strong)	
magnetic	

Everyday Materials

Metal saucepans **conduct** heat to warm food.



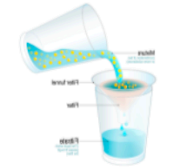
Wooden spoons and plastic handles **insulate** heat so hands do not get burned.

Separating Materials

Sieving



Filtering



Magnetism



Magnetic metals:

- iron
- nickel
- steel

Soluble Materials

Some solids **dissolve** in water (**SOLUBLE**).

coffee



sugar



salt



jelly



Some solids do not **dissolve** in water (**INSOLUBLE**).

pepper



sand



wax



Key Vocabulary

conductive	a material that allows heat and/or electricity to pass through it
magnetic	material that is attracted to a magnet
thermal	using or producing heat
conduction	heat moving from one object to another through contact
hardness	resistance to scratching and pressure
force	when an object is acted upon by a pull or push motion in a specific direction
dissolve	to mix with a liquid and become part of the liquid
solute	a substance that can be dissolved in liquid
solvent	a substance that can dissolve in a solute, water is a solvent
substance	any material, such as sugar
filtering	the separation of a mixture using a tool with small holes to separate particles
evaporation	the process where a liquid changes into a gas

To know statements



I know about properties of materials including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets.

I know about thermal conductors and thermal insulators.

I know how to explore the hardness of materials.

I know some materials that become soluble in water.

I know how to investigate the solubility of materials.

I know how mixtures could be separated by filtering, sieving, evaporating or magnets.

What can you remember from previous units?

Can you remember some common electrical conductors and insulators?

What are the properties of different types of rocks and how did you test their hardness?

Anything else you have learnt? What have you enjoyed?

