

Year 5 Science - Summer Term 1: Properties & Changes of Materials





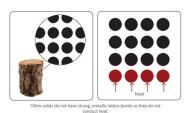
1. Materials can be grouped according to their basic physical **properties.** Properties include: hardness, solubility, transparency, conductivity (electrical and thermal) and magnetism.



2. Thermal conductors conduct heat. Solid metals are good thermal conductors because their **particles** are closely packed and they have strong, lattice metallic bonds.

What are the properties of materials and how can they change?

3. Solids, such as plastic, wood and glass do not have these bonds so they do not conduct heat. They are **thermal insulators**. Liquids and gases are poor conductors of heat because their particles are further apart.



4.Solubility is a measure of a material's ability to dissolve in a solvent. A material is soluble if it can dissolve in a solvent to form a solution. A material is insoluble if it cannot be dissolved in a solvent to form a solution. Dissolving is when a solute becomes incorporated into a solvent and can no longer be seen.

dissolve	soluble	insoluble	bonds	conduct	insulate
particles	solubility	conductors	properties	insulators	solution