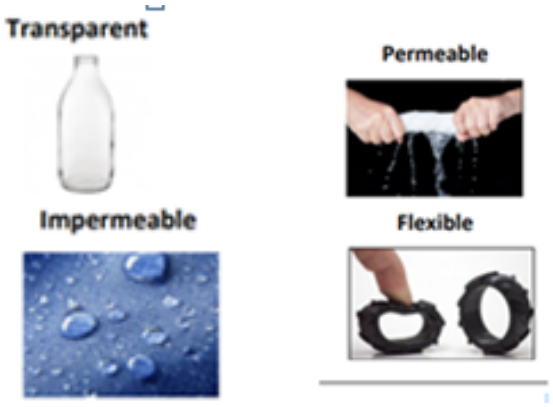
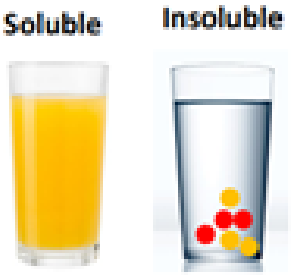
Carr Head Primary School – Knowledge Organiser

Science	Properties of Materials	Year 5	Autumn 1

COMPARING AND GROUPING - Materials can be compared and grouped together on the basis of their properties including:

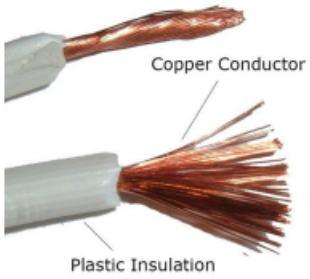
- **Hardness** – how hard or soft a material is
- **Solubility** – whether a material can dissolve
- **Transparency** – whether it allows light to pass through
- **Conductivity** (electrical or thermal) – whether it allows heat or electricity to carry through
- **Response to magnets** – whether it is magnetic

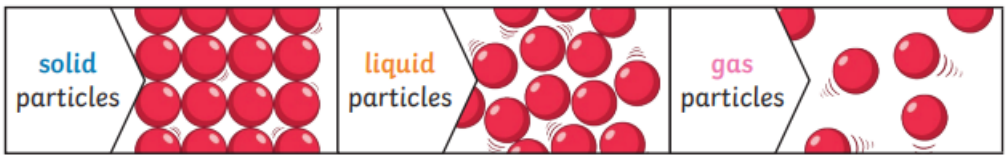




Electrical conductors allow electricity to pass through them easily while electrical insulators do not.

Electrical insulators have a high resistance which means that it is hard for electricity to pass through these objects.





Different materials are used for particular jobs based on their properties: electrical conductivity, flexibility, hardness, **insulators**, magnetism, solubility, thermal conductivity, **transparency**.

Quiz
What is an electrical insulator?
What does transparent mean?
What does impermeable mean?
What does solubility mean?