The Palmer Academy - Science

Year: 5 | Term: Autumn 1 | Topic: Properties of Materials

Important Facts:

- Materials have different uses, depending on their properties and state (solid, liquid, gas)
- Properties include:
  - hardness
  - transparency
  - electrical conductivity
  - thermal conductivity
  - attraction to magnets
- Some materials will dissolve in a liquid and form a solution
- Some materials are insoluble and form sediment

Working Scientifically:

- Think carefully about how accurate your measurements are
- Decide if your results are good enough to help you answer your science question

Key concepts / diagrams:

Solubility Diagram: Showing how sugar dissolves in water vs. sand settling at the bottom.

Conductor vs. Insulator Chart: Comparing materials like metal, plastic, wood, and rubber.

Conductors	Insulators

Vocabulary:

properties	the features of a material that tell us what it is like
thermal	related to heat
electrical	related to electricity
insulator	a material that does not allow heat to pass through easily
conductor	a material that allows heat to pass through easily
mixture	a material made up of two or more different substances which are physically combined
dissolve	when a solid mixes completely with a liquid to form a solution
soluble	a substance that can dissolve in a liquid
insoluble	a substance that cannot dissolve in a liquid
hardness	how difficult it is to scratch or deform a material