

ROCKET WORDS

Learn these words and their definitions.

Key Word	Definition
comparative test	Undertaking a test with a controlled variable to help answer questions.
elasticity	The ability of a material to resume its normal shape after being stretched or compressed.
plasticity	The ability for a material to be easily shaped or moulded.
transparent	The ability to allow light to pass through so that objects behind can be distinctly seen.
thermal conductivity	The ability of a material or substance to conduct or transfer heat.
electrical conductivity	The measure of the amount of electrical current a material can carry or it's ability to carry a current.

Knowledge Organiser Properties of Materials – Part 1

Ways to test materials

Hardness

How resistant a material is to scratching and pressure.
Hard materials: hardwood, metal, plastics



Strength

The amount of force needed to break a material.
Strong materials: many metals and woods.



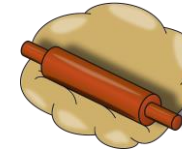
Elasticity

Ability of a material to turn to its original shape after the force is removed
Elastic materials: rubber bands, metal coil springs



Plasticity

Ability to retain the new shape when the force is removed.
Example materials: plasticine, clay.



Absorbency

Ability of a material to soak up liquid.
Absorbent materials: sponge, cotton wool, towel.



Waterproof

Resistant and repellent to a liquid
Waterproof materials: Many rubbers and plastics



Lesson Sequence

1

• To investigate materials and their properties.

2

• To understand what insulators are.

3

• To group materials according to their properties.

4

• To investigate thermal insulation.

5

• To investigate thermal conduction and insulation.

6

• To sort materials using a classification key.

Some insulating materials found in our houses include fibre glass loft insulation, cavity wall filler and double-glazed windows.

