Year 5/6 Properties of Materials Knowledge Organiser











What do I know?

- I can identify and compare the suitability of different materials e.g., the suitability of a given jumper. (Y2)
- I can identify materials that are absorbent and waterproof (Y2).
- I can identify and compare properties of rocks. (Y3)
- I can recognise magnetic materials e.g., metal is a magnetic material, but not all metals are magnetic (Y3). I can also identify materials that are electrical insulators (Y4).

Gems of knowledge

- I will learn that different materials have different physical properties.
- I will learn about thermal insulators.
- I will investigate and compare the absorbency of different materials.
- I will learn about liquid viscosity.

How will I work like a Scientist?

- I will plan different types of scientific enquiry to answer a variety of questions.
- I will recognise and control variables where necessary (Y5- with support).
- I will select all equipment needed (Y5- with support).
- I will use a range of scientific equipment to take measurements with increasing accuracy.
- I will identify when to take repeat readings (Y5- begin to understand).
- I will take repeat readings.
- I will record data and results of increasing complexity e.g. line graphs.
- I will report and present findings from enquiries, including conclusions and suggest causal relationships (Y5- with prompting).
- I will report and present findings from enquiries in oral and written forms.
- I will identify scientific evidence that has been used to support or challenge arguments.
- I will use test results to suggest further comparative or fair tests (Y6- make predictions)
- Y6 only- I will report and present findings from enquiries, including explanations of the validity of results.

Vocabulary

Meaning

Thermal insulator

A material that does not allow heat to pass through easily.

Thermal conductor

A material that does allow heat to pass through easily.

Viscosity

The thickness of a liquid.

Absorbency

An object's ability to soak up or take in other substance

Magnetism

Magnetism is an invisible force or field that causes objects to attract or repel one another.

Significant Scientist



Ruth Benerito is an American chemist who created a new material. She invented 'wrinkle free' cotton fabric which helped the cotton industry stay in business.

Q Careers in Chemistry

X

Chemists study various chemical elements and compounds, their properties and how they work together in our bodies and the world around us

Read me!



What A Waste by Jess French.

Kensuke's Kingdom by Michael Morpurgo.

