



<p>Vocabulary</p> <p>Materials, Hardness, Transparency, Magnetism, Electrical conductivity, Thermal conductivity, Reversible/irreversible changes, Hazards, Comparative testing, Filtering, Reactant</p>	<p>Skills <i>Enquiry and working scientifically skills (UKS2)</i></p> <ul style="list-style-type: none"> • plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary • take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate • record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • use test results to make predictions to set up further comparative and fair tests • report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations • identify scientific evidence that has been used to support or refute ideas or arguments. 	<p>What we already know</p> <p><u>KS1 knowledge</u></p> <ul style="list-style-type: none"> • Y2/Sp1 – Everyday materials – properties and uses including what properties are needed to implement a change in appearance of material • Y2/Sp1 - Shapes of solids objects can be changed by squashing, bending, twisting and stretching <p><u>KS2 knowledge</u></p> <ul style="list-style-type: none"> • Y3/A2 – Rocks - Different surfaces ‘feel’ different • Y3/Sp2 – Magnets - can separate ‘magnetic’ from ‘non-magnetic’ materials • Y4/Sp1/2 – States of Matter – The differences between solids, liquids and gases. • Understand that ice, water and steam are the same ‘material’ in different ‘states’
<p>Application/ Outcomes</p> <ul style="list-style-type: none"> • Separating solutions • Solubility investigation • Information booklet – new man made materials • Identify materials that are good insulators or conductors of heat. Design a product with real life benefits using this knowledge (eg. Packed lunch bag) • Build a circuit using different electrical conductors. • Group materials based on their properties and suggest uses • Reversible and irreversible changes • Changes of state 		<p>Concepts</p> <ul style="list-style-type: none"> • Different materials are used for different jobs based on their properties (electrical conductivity, flexibility, hardness, insulators, magnetism, solubility, thermal conductivity, transparency) • Some materials can change state and these changes can be reversible (through sieving, filtering or evaporating) • Some materials can change state and these changes can be irreversible – A new product is formed, and this is called a reactant.
<p>Other/Cross Curricular Links with English/Maths</p> <p>Topic reading – new materials Diversity – women in science</p>	<p>SEND Adaptations</p> <p>Word banks, image mats, differentiated worksheets, adult support</p>	