


| Science Skills Unit: Properties of Matter | | Year: 3 |
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| Science Skills Unit Overview | | |
| <ul style="list-style-type: none"> • Pupils will learn that matter, the “stuff” of which everything is made, exists in many forms. • Pupils will practice sorting and grouping materials by characteristics called properties and investigate how the properties of different types of matter make them useful for different tasks. • Pupils will be introduced to the practice of taking measurements, which permit simple comparisons. • They will explore matter, including the distinction between physical and chemical properties and changes. | | |
| Key Vocabulary | | |
| Container, example, waterproof Gas, liquid, matter, solid, observe, sort Property, describe Temperature, change, volume Classify, investigate, observe Prediction, property, temperature, thermometer, compare, container, useful Matter, property, temperature, materials, reversible, temperature, change, cooling, description, heating Heating, matter, temperature, absorbency, absorption, gas, liquid, solid Flexible, hardness, porous, strength, texture, data, evidence, thermal conductivity, pieces and parts, component Matter, property, container, evidence, pieces and parts, observe, sort, property, | | |
| Further reading list | | |
| <i>(Reading these commercial texts would support and enhance learning in this domain.)</i> | | |
| <ul style="list-style-type: none"> • The Usborne Illustrated Dictionary of Chemistry (Usborne, 2012) • What’s Chemistry all about? By Alex Frith and Lisa Gillespie (Usborne, 2012) • Materials (part of the Usborne Library of Science series) (Usborne, 2001) • The Periodic Table: Elements with Style by Basher (Kingfisher, 2011) – comes with a poster • Changes by Anthony Browne • Electrifying Egyptians on Giglets • Tin – Padraig Kenny (Complexity of the Narrator) | | |
| Independent Learning Project | | |
| <i>Pupils are asked to complete at least one independent learning project at home during the Science Skills Unit. Some suggestions are below.</i> | | |
| <p>Objects are made from different materials. The materials used to make an object are chosen for their properties. Choose 3 objects from around your home/school. Draw a picture of it and label the different materials it is made from. Identify the properties these materials have, and why they were chosen to make the object. Here is an example:</p>  <p>ct: Frying pan. Metal → Plastic</p> | <p>Make a list of foods that change state when heated or cooled, such as eggs, water, butter and chocolate. Plan and make an ‘alchemist’s banquet’ for your family and include foods from your list. You could add a bit of sparkle by sprinkling edible glitter or miniature silver and gold balls on top!</p> <p>Take a photo of the banquet and label the image.</p> | <p>Carrier bag test – bags are made from different materials with certain properties. Use different carrier bags and test which is the strongest. How many items can they hold before they break? You will need help from your parents.</p> |
| <p>Design and illustrate a new item of clothing to keep you warm in the winter or keep you cool in the summer.</p> | <p>Test the properties of these materials http://www.sciencekids.co.nz/gamesactivities/materialproperties.html</p> | <p>Create a 2D or 3D model showing the properties of solids, liquids and gases.</p> <p>Write a poem about any solid, liquid or gas.</p> |

