

Year 1 – Everyday materials	Main Outcomes: <ul style="list-style-type: none"> Distinguish between an object and the material from which it is made. Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. Describe the simple physical properties of a variety of everyday materials. Compare and group together a variety of everyday materials on the basis of their simple physical properties. 	Focus: Science – physics
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What should I already know?	<table border="1"> <thead> <tr> <th style="background-color: yellow;">Vocabulary</th> <th style="background-color: yellow;">Meaning</th> </tr> </thead> <tbody> <tr><td>absorbent</td><td>material that soaks up liquid easily</td></tr> <tr><td>bendy/flexible</td><td>an object that bends/flexes easily into a curved shape</td></tr> <tr><td>blunt</td><td>not sharp</td></tr> <tr><td>brick</td><td>rectangular blocks of baked clay used for building walls, which are usually red or brown</td></tr> <tr><td>brittle</td><td>fragile; easily broken</td></tr> <tr><td>dull</td><td>a colour or light that is not bright</td></tr> <tr><td>elastic</td><td>a rubber material that stretches when you pull it and returns to its original size and shape when you let it go</td></tr> <tr><td>fabrics</td><td>cloth or other material produced by weaving together cotton, wool or other threads.</td></tr> <tr><td>foil</td><td>sheets of metal as thin as paper</td></tr> <tr><td>glass</td><td>a hard transparent material</td></tr> <tr><td>magnetic</td><td>capable of being magnetised or attracted by a magnet</td></tr> <tr><td>man-made material</td><td>things that are created by people the substance of which a thing is made</td></tr> <tr><td>metal</td><td>a hard substance such as iron, steel, gold, or lead</td></tr> <tr><td>natural</td><td>things that exist in nature and are not made by people</td></tr> <tr><td>opaque</td><td>if an object or substance is opaque, you cannot see through it</td></tr> <tr><td>plastic</td><td>a material which is light in weight and does not break easily</td></tr> <tr><td>properties</td><td>how a material behaves (its qualities)</td></tr> <tr><td>rock</td><td>the hard substance which the Earth is made of</td></tr> <tr><td>rough</td><td>uneven and not smooth</td></tr> <tr><td>sharp</td><td>having a fine point</td></tr> <tr><td>shiny</td><td>bright or glossy in appearance</td></tr> <tr><td>stiff/hard/tough</td><td>difficult or impossible to bend, stretch or flex; firm to the touch; strong</td></tr> <tr><td>stretchy</td><td>an object that stretches easily</td></tr> <tr><td>transparent</td><td>easily seen through</td></tr> <tr><td>waterproof</td><td>material that does not soak up water</td></tr> </tbody> </table>	Vocabulary	Meaning	absorbent	material that soaks up liquid easily	bendy/flexible	an object that bends/flexes easily into a curved shape	blunt	not sharp	brick	rectangular blocks of baked clay used for building walls, which are usually red or brown	brittle	fragile; easily broken	dull	a colour or light that is not bright	elastic	a rubber material that stretches when you pull it and returns to its original size and shape when you let it go	fabrics	cloth or other material produced by weaving together cotton, wool or other threads.	foil	sheets of metal as thin as paper	glass	a hard transparent material	magnetic	capable of being magnetised or attracted by a magnet	man-made material	things that are created by people the substance of which a thing is made	metal	a hard substance such as iron, steel, gold, or lead	natural	things that exist in nature and are not made by people	opaque	if an object or substance is opaque , you cannot see through it	plastic	a material which is light in weight and does not break easily	properties	how a material behaves (its qualities)	rock	the hard substance which the Earth is made of	rough	uneven and not smooth	sharp	having a fine point	shiny	bright or glossy in appearance	stiff/hard/tough	difficult or impossible to bend, stretch or flex; firm to the touch; strong	stretchy	an object that stretches easily	transparent	easily seen through	waterproof	material that does not soak up water
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<p>I will have weekly or blocked science lessons. In lessons, I will be taught a skill and I will gain knowledge and understanding through the process of scientific enquiry (observing over time; pattern seeking; identifying, classifying and grouping; comparative and fair testing (controlled investigations); and researching using secondary sources).</p> <p><u>Possible lines of enquiry</u></p> <ul style="list-style-type: none"> Compare and contrast a wide variety of objects and materials. Perform simple tests to explore questions, for example: 'What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast's leotard?' 																																																					
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<p>Hamilton Science planning; plants (all planning also saved on SharePoint). https://www.hamilton-trust.org.uk/science/year-1-science/everyday-materials-lets-build/</p>																																																					

Knowledge and Skills Map – Science at Estcots School

Knowledge to understand		Skills to learn	
Which materials are some objects made from?	<p>Objects are things that you can see or touch. They are made from different materials.</p>	<ul style="list-style-type: none"> ➤ asking simple questions and recognising that they can be answered in different ways ➤ observing closely, using simple equipment ➤ performing simple tests ➤ identifying and classifying ➤ using their observations and ideas to suggest answers to questions ➤ gathering and recording data to help in answering questions ➤ drawing diagrams to explain something 	
What words can I use to describe materials ?	<p>Materials have different properties. Properties describe how a material behaves (its qualities).</p> <p>bendy, stretchy, flexible, stiff, hard, bright, shiny, dull, rough, bumpy, flat, smooth, soft, tough, strong, brittle, sharp, blunt, transparent, opaque, waterproof, absorbent, magnetic, non-magnetic.</p>	<p>Cross-curricular (maths)</p> <ul style="list-style-type: none"> ➤ comparing, describing and solving practical problems (including using hoops as Venn diagrams for sorting) 	
Which materials are natural and which are man-made ?	<p>Natural materials are found in nature (for example, chalk, sand, oil, leather, iron, gold, cotton, coal, wool).</p> <p>Man-made materials are produced by humans (for example, concrete, glass, paper, rubber, steel, plastic, polyester).</p>	<p>Equipment to become familiar with</p> <p>Magnets</p> <p>Pasteur pipettes/syringes (for dropping water onto materials to test for absorbency)</p>	

Evidence of Learning	How will I know what I've learnt?
<p>Science books</p> <p>Photos</p> <p>Videos</p> <p>Pupil conferencing</p> <p>Teaching and learning observations</p> <p>Learning walks</p> <p>Data analysis</p>	<p>See KS1 teacher assessment exemplification for science</p> <p>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/763062/2018_key_stage_1_teacher_assessment_exemplification_science.pdf</p> <p>See also Hamilton Science_Assessment_Y1 (saved in planning folder on Sharepoint).</p> <p>KS1 science quizzes:</p> <p>https://gcequiz.com/quiz/ks1-science-quizzes</p> <p>https://www.woodendprimaryschool.com/year-1/</p>