



















Thurcroft Infant School
Science Unit Plan – Y1 Everyday Materials

Progression	Outcomes
<p>Prior learning:</p> <ul style="list-style-type: none"> • Use all their senses in hands-on exploration of natural materials. (Nursery - Materials, including changing materials) • Explore collections of materials with similar and/or different properties. (Nursery - Materials, including changing materials) • Talk about the differences between materials and changes they notice. (Nursery - Materials, including changing materials) <p>Future learning:</p> <ul style="list-style-type: none"> • Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. (Y2 - Uses of everyday materials) • Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. (Y2 - Uses of everyday materials) 	<p>Subject knowledge – children will learn about:</p> <p>NC</p> <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. <p>Key Knowledge</p> <ul style="list-style-type: none"> • know the name of the materials an object is made from • know about the properties of everyday materials • know the difference between wood, plastic, glass, metal, water and rock • Compare and group materials. <p>Enquiry Skills</p> 

Enquiry Question	Science Enquiry Skills	Vocabulary
<p>1. What is it made of? To be able to identify a variety of common materials.</p> <p>To be able to distinguish between an object and the material from which it is made</p> <p>Assessment Questions</p> <ul style="list-style-type: none"> • Do children know what a material is? • Can children identify a variety of common materials? • Do children know where some materials come from? 	<ul style="list-style-type: none"> • To name everyday materials and describe their properties. • To classify and sort objects in relation to the material it is made 	Rubber, fabric wood, stone, glass, plastic, metal Stretchy, elasticity, stiff, shiny, dull, soft, hard, transparent, opaque smooth, rough, bendy
<p>2. What are the properties of (material)? To be able to describe materials according to their properties.</p> <p>Children will explore a range of materials and use words such as ‘stretchy, elasticity, stiff, shiny, dull, soft, hard, transparent, opaque smooth, rough or bendy’ to describe and/or sort a variety of materials and objects.</p>	<ul style="list-style-type: none"> • To name everyday materials and describe their properties • To classify and sort objects in relation to its properties. 	

<p>Children to sort materials by properties. Children to play -What is in the bag- Children will feel and describe objects for peers to guess.</p> <p>Assessment Questions</p> <ul style="list-style-type: none"> • Can children use a variety of appropriate words to describe what various materials are like? • Can children match materials to various properties? • Can children group objects and materials according to their properties? 	 	
<p>3. Can I make a window out of wood?</p> <p>To be able to describe why some materials suit certain objects better than others.</p> <p>Children will consider why the properties of materials make them suitable for certain uses. They will then select appropriate materials for use in a range of objects. Focus on transparent and opaque materials.</p> <p>Assessment Questions</p> <ul style="list-style-type: none"> • Can children identify and describe a variety of materials? • Can children suggest why a material has been chosen for a particular purpose? <p>Can children identify materials that are inappropriate for certain uses and offer alternatives?</p>	<ul style="list-style-type: none"> • To classify and sort objects in relation to its properties.  	
<p>4. Science Investigation.</p> <p>Which material is best to make a rainhat?</p> <p>To carry out an experiment to find out which materials are waterproof.</p> <p>Children will devise methods for testing materials to determine whether or not they are waterproof. They may then either test materials, or produce a model of a waterproof product.</p> <p>Assessment Questions</p> <ul style="list-style-type: none"> • Can children make suggestions for how to test which materials are waterproof and which aren't? • Can children test a variety of materials to see which are waterproof and which aren't? • Can children draw conclusions from their experiment? 	<ul style="list-style-type: none"> • To plan and test if _____ is the hardest/softest, stretchiest, stiffest/ most transparent material. • To begin to understand the need of a fair test. • To record results in a class table    	
<p>5. Science Investigation.</p> <p>Which ball will bounce the highest?</p> <p>To carry out an experiment to find out which ball will bounce the highest.</p> <p>Children will devise methods for testing and record their results. The children will interpret the data to state which material was most effective in the test.</p> <p>Assessment Questions</p>	<ul style="list-style-type: none"> • To plan and test if _____ is the hardest/softest, stretchiest, stiffest/ most transparent material. • To begin to understand the need of a fair test. • To record results in a class table 	

<ul style="list-style-type: none"> • Can children make suggestions for how to test which materials are waterproof and which aren't? • Can children test a variety of materials to see which are waterproof and which aren't? • Can children draw conclusions from their experiment? 	   	
<p>6. Science Investigation.</p> <p>Which surface makes the ball bounce the highest?</p> <p>To carry out an experiment to find out which surface materials makes the ball bounce the highest.</p> <p>Children will devise methods for testing and record their results. The children will interpret the data to state which material was most effective in the test.</p> <p>Assessment Questions</p> <ul style="list-style-type: none"> • Can children make suggestions for how to test which materials are waterproof and which aren't? • Can children test a variety of materials to see which are waterproof and which aren't? <p>Can children draw conclusions from their experiment?</p>	<ul style="list-style-type: none"> • To plan and test if _____ is the hardest/softest, stretchiest, stiffest/ most transparent material. • To begin to understand the need of a fair test. • To record results in a class table    	

Assessment

Essential knowledge acquired:

By the end of the unit children will learn to identify common materials and begin to describe their properties. The children will begin to consider which material is best suited for a particular purpose e.g. glass-window.

Misconceptions

Some children may think:

- only fabrics are materials
- only building materials are materials
- only writing materials are materials
- the word 'rock' describes an object rather than a material
- 'solid' is another word for hard.

Key Scientist

