

Brough Primary School – Curriculum Intention Plan 2022 - 2023



Subject: Science Year Group: Year 1/2		Area of learning: Uses of Everyday Materials (Year A)
Links to previous work/Remember when	<ul style="list-style-type: none"> Children will have sorted materials based on their properties. Children have spent time sorting and classifying materials. Children will know a little about solids, liquids and gases and the difference between man-made and natural materials. Children will also have done some limited classification based on the uses of materials. <p><u>Working Scientifically</u></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. 	
Term	Year 1/2	Key Skills to be taught
Spring 2023 What the children should know at the end of this series of lessons		<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 Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching <p><u>Working Scientifically</u></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

Vocabulary

Shape, changed, twist/twisting, squash/squashing, bend/bending, stretch/stretching, material, properties, strong, tear, rip, weight, rigidity, flexibility, concertina, material, properties, strong, tear, rip, flexible, rigid, hard, soft, stretchy, stiff, strong, weak, rigid, flexible.

Sequence of learning	Objectives and suggested details provided by subject leader.
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1	<p>i). Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii). Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>iii). Ask simple questions and recognise that they can be answered in different ways.</p> <p>iv). Observe closely, using simple equipment.</p> <p>v). Perform simple tests.</p> <p>vi). Identify and classify.</p> <p>vii). Use their observations and ideas to suggest answers to questions.</p> <p>viii). Gather and record data to help answer questions.</p> <p>1. Explore the properties of a variety of balls and predict which is the bounciest</p> <p>2. Consider that the materials from which the balls are made may have an effect on their bounciness</p> <p>3. Consider: what does 'bounciest' mean? Is it the ball that bounces the highest or for the longest time?</p> <p>4. Discuss and design an investigation to test which ball is the bounciest.</p>
2	<p>i). Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii). Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>iii). Ask simple questions and recognise that they can be answered in different ways.</p> <p>iv). Observe closely, using simple equipment.</p> <p>v). Perform simple tests.</p> <p>vi). Identify and classify.</p> <p>vii). Use their observations and ideas to suggest answers to questions.</p> <p>viii). Gather and record data to help answer questions.</p> <p>1. Look at a selection of fabric and understand why stretchy fabric is sometimes used in clothing</p> <p>2. Investigate and explore the elasticity of fabric and make predictions</p> <p>3. Begin to understand how to make a test fair and to record results in a bar chart</p>
3	<p>i). Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.</p> <p>ii). Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p>

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	<p>iii). Ask simple questions and recognise that they can be answered in different ways. iv). Observe closely, using simple equipment. v). Perform simple tests. vi). Identify and classify. vii). Use their observations and ideas to suggest answers to questions. viii). Gather and record data to help answer questions.</p> <p>1. Understand that some materials need to be able to 'give' a little and not break (for bridges carrying heavy traffic, for example) 2. Explore a selection of materials and discuss how they might be tested for their rigidity (identical lengths of wood, plastic, metal, card) 3. Devise and carry out an investigation to test how much they will bend and discuss the results</p>
4	<p>i). Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. ii). Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>iii). Ask simple questions and recognise that they can be answered in different ways. iv). Observe closely, using simple equipment. v). Perform simple tests. vi). Identify and classify. vii). Use their observations and ideas to suggest answers to questions. viii). Gather and record data to help answer questions.</p> <p>1. Identify and sort objects with different material properties 2. Test fabrics for their durability and toughness and consider the everyday usefulness of materials 3. Consider the importance of material properties by wondering what life would be like without it</p>
5	<p>i). Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. ii). Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.</p> <p>iii). Ask simple questions and recognise that they can be answered in different ways. iv). Observe closely, using simple equipment. v). Perform simple tests. vi). Identify and classify. vii). Use their observations and ideas to suggest answers to questions. viii). Gather and record data to help answer questions.</p>

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	<ol style="list-style-type: none"> 1. Investigate paper strength, working in groups and recording their findings 2. Predict the outcome of the investigation and produce a simple bar chart or annotated drawings of the results
6 (Assessment Activity)	<p>Suggested possible assessment tasks</p> <ol style="list-style-type: none"> 1. Articulate their learning about materials and their properties 2. Work in small groups to design and make a paper bridge to hold a toy car, selecting the paper they think will work best 3. Explain their selections and predictions for the success of their bridge

Learning Outcome/product

Children are aware that some materials are used for more than one thing (metal can be used for coins, cans, cars, chair legs etc). Children can explain why different materials are suitable for their everyday uses.

Assessment records	List only those children who have not achieved the expected outcomes.

Assessment records	List only those children who have exceeded the expected outcomes.

End of unit assessment question

E.g. Which materials can be changed by squashing, which by bending, which by twisting and which by stretching?