

*Inspiring and enabling our school community to live life to the full*



**YEAR 2**

**Subject: Science**  
**Materials – Changing Shape**

**Characteristics of an Effective Learner**

Courage  
Commitment  
Collaboration  
Creativity  
Curiosity

Our Science curriculum aims to enthuse children and help them to be curious and develop a sense of excitement about the world. Through a range of teaching, learning and extra-curricular opportunities, children will develop scientific knowledge and conceptual understanding to recognise the uses and implications of Science, today and for the future. We encourage children to ask their own questions; predict how things will behave and analyse causes, using Science to explain what is happening.

<b>Prior Learning:</b> Year 1 – Children learn to identify different materials and know how some of them are made. They investigate properties such as waterproofness and buoyancy.	<b>Key Vocabulary taught in this unit:</b> Materials, plastic, wood, fabric, metal, rock, rubber, elastic, bend, stretch, twist, squash, rigid, bendy, stretchy, stiff, soft, floppy,
<b>Intent: What do we want the children to know, be able to do by the time they complete this unit?</b> <b>Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching</b> Test different objects and sort them according to which actions can be used to change their shapes. Link the actions from previous lessons to the properties of materials, and then test materials for those properties. Test different types of elastic to see how well they stretch.	
<b>Enquiry skills</b> <b>Asking simple questions and recognising that they can be answered in different ways</b> Plan how to find out whether the shapes of solid objects made from different materials can be changed. Plan an experiment to test which type of elastic would make the best catapult. <b>Observing closely, using simple equipment</b> Observe what happens when solid objects made from different materials are squashed, bent, twisted and stretched. Use a ruler to measure how far different types of elastic will stretch. <b>Performing simple tests</b> Test objects according to whether they can be squashed, bent, twisted or stretched. Test different types of elastic to find out which is the stretchiest. <b>Identifying and classifying</b> Sort objects according to whether they can be squashed, bent, twisted or stretched. <b>Using their observations and ideas to suggest answers to questions</b> Make links between the properties of different materials and which actions can be used to change their shapes. Look at the data they have collected about different types of elastic and how far they stretch, and make a decision about which would be best for a catapult. <b>Gathering and recording data to help in answering questions</b> Use a ruler to measure how far different types of elastic will stretch and use this information to help them decide which is most suitable for a catapult.	
<b>Impact / Outcome: What will the final product / result be?</b> Children know how the shape of some materials can be changed by different actions and they compare the stretchiness of different types of elastic in order to decide which would make the best parachute.	
<b>P4C Inquiry (where appropriate)</b> NA	

