

 PARK LANE PRIMARY SCHOOL	YEAR 2 USE OF EVERYDAY MATERIALS			SCIENCE
PRIOR KNOWLEDGE Builds on previous Yr1 learning: - 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		COMMON MISCONCEPTIONS Materials can only be used for one purpose: Through investigations, the children will understand that the properties of materials can be changed or altered, enabling them to be used for different purposes. Wood can be used as an example to demonstrate that it can be hard enough to be used as furniture but also manufactured to become paper!		
Lesson Intention	National Curriculum Reference	Scientific Enquiry	Rocket Words	Resources
Identify different materials and their uses	Identify and compare the suitability of a variety of everyday materials	Pattern Seeking Use observations and ideas to suggest answers to questions	Material Property Suitable Object Brick	Objects from around the classroom.
Understand how to select the right materials to build a bridge.	Identify and compare the suitability of a variety of everyday materials	Comparative & Fair Testing Compare the strength of different material. Perform a simple test.	Bridge Triangle Obstacle Structure Construction	Two books, a range of weights, variety of materials to create a bridge - aluminium foil, card, paper, wood, string, masking tape etc.
Explore and test the stretchiness of materials	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Answering Questions through Collecting, Analysing & Presenting Data (Problem Solving) Gathering and recording data to help in answering questions and begin to use simple scientific language with increasing independence	Stretchy Elastic Floppy Hinder Limit	A variety of materials of different stretchiness (e.g. cotton, wool, nylon...), tape measure or ruler; scissors, marbles, yoghurt carton, string, paper clips.
Understand that materials can change their shape by twisting, bending, squashing or stretching	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching	Pattern Seeking Use observations and ideas to suggest answers to questions	Bend Twist Squash Stretch Force	A variety of materials which can be twisted, bent, squashed or stretched (e.g. plasticine, wool, foil...).

Find out about Charles Macintosh and John McAdam and explore how materials are suitable for different purposes	Identify and compare the suitability of a variety of everyday materials	Answering Questions through Collecting, Analysing & Presenting Data (Problem Solving) Explore how materials are suitable for different purposes.	➤ Charles Macintosh (inventor of waterproof raincoat) Mackintosh Protective Fluorescent Safety Waterproof ➤ John McAdam (Scottish civil engineer & road-builder)	.
Explore how materials are suitable for different purposes	Identify and compare the suitability of a variety of everyday materials	Comparative & Fair Testing Performing simple tests Test materials for their waterproof	John McAdam Merchant Bound Highway Road	Four different sheets of fabric (tissue, tinfoil, clingfilm, plastic, wool fabric, nylon), beaker, elastic band, one tray per table, syringe per group, water.