

Upton Infant School's Science Curriculum Rationale			
Brilliant scientists... • Develop their scientific knowledge to help them greater understand the world • Understand that science has changed, and will change, our world • Are excited and curious about the world • Can predict what might happen in an investigation • Can make observations about what is happening in an investigation • Can explain what has happened in an investigation			
Science Curriculum – Everyday Materials			
Reception	Year One	Year Two	
Intent			
Brilliant scientists in Reception use their senses to explore the world around and begin to understand that there are different materials with different uses.	Brilliant scientists in Year One are curious about the world around them. They understand that objects are made from different materials and they can describe the properties of these materials. They carry out tests to investigate the properties of materials.	Brilliant scientists in Year Two are curious about what the world around them is made of. They are aware that all everyday objects are the result of scientific discovery and invention. They understand that materials have different properties and this makes them suitable for different purposes. They answer scientific questions by carrying out scientific investigations to find out the suitability of different materials for a particular purpose.	
Planning considerations for teachers			
• Are children given the opportunity to use their senses (touch, sight, sound and smell) to explore materials and their textures?	• Are the children given the opportunity to explore a wide variety of different materials with differing physical properties and explore these through practical investigations?	• Are the children aware of scientists who have pioneered different materials, for example John Dunlop, Charles Macintosh or John McAdam? • Are the children given the opportunity to carry out an investigation of different materials and their properties?	
Knowledge			
Brilliant scientists... • know some different words to describe the textures of materials	Brilliant scientists... 1• can distinguish between an object and the material from which it is made 2• can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water and rock 3• know how to describe the simple physical properties of a variety of everyday materials 4• compare and group together a variety of everyday materials on the basis of their simple physical properties	Brilliant scientists... 1• know that objects can be made from different materials 2• know that objects can be natural or manmade 3• know that materials can be suitable for particular uses 4• know that objects made from some materials can be changed by twisting, squashing, stretching and bending	Next steps: • Children will be taught to group together a variety of everyday materials on the basis of whether they are attracted to a magnet and identify some magnetic materials • compare and group different types of rocks on the basis of their appearance and simple physical properties.
Working Scientifically			
Brilliant scientists... • use their senses to explore the texture of a variety of different materials • explore which materials float and sink	Brilliant scientists... 5• ask simple questions e.g. “Which materials will protect Humpty?” 6• observe closely, using simple equipment 7• perform simple tests to investigate the properties of materials 8• identify and classify objects after investigating them	Brilliant scientists... 5• ask simple questions and recognise that they can be answered in different ways 6• perform simple test 7• observe closely, using simple equipment 8• use their observations and ideas to suggest answers to questions	
Our promise to make science learning brilliant			
• Take part in a Dinosaur fashion show for parents	• Carry out practical and engaging investigations such as investigating floating and sinking and testing crash mats for Humpty Dumpty.	• Hold a ‘science workshop’ to e.g. test materials, make slime, bridge making, floating and sinking	
Meet some brilliant scientists			
			
Charles Macintosh		John Dunlop	

