

British Inventors : DT : Year 3/4

	Learning Objective	Overview	Assessment Questions	Resources
Lesson 1	To investigate the invention of the telephone.	Children are introduced to Alexander Graham Bell and his invention of the telephone. The children will discuss the invention and how it may have affected people's lives at the time and after recent developments e.g. the invention of the smartphone. The children use their evaluating skills when testing different string telephones or they have the opportunity to design a phone of the future.	<ul style="list-style-type: none"> • Can children reflect on how the invention of the telephone changed the way people lived? • Can children identify ways in which the telephone has changed to meet people's needs? • Are children able to evaluate a product's performance. 	<ul style="list-style-type: none"> • Slides • Worksheet 1A/1B/1C • String telephones • String Telephone Instruction Sheet • Photo Card 1A (FSD? activity only) • Worksheet 1D (FSD? activity only)
Lesson 2	To investigate the invention of the World Wide Web.	Children are asked to reflect on their use of the World Wide Web. They explore the differences between the internet and the WWW. They think about all the activities they do in their day-to-day lives which use these inventions after being introduced to the inventor Tim Berners-Lee. Children will take the time to explore and discuss the impact that this invention had on people's lives.	<ul style="list-style-type: none"> • Can children distinguish between the World Wide Web and the internet? • Can children reflect on how an invention has changed their lives? • Can children reflect on how an invention has changed the world? 	<ul style="list-style-type: none"> • Slides • Activity Cards 2A • Worksheet 2A/2B • Challenge Cards 2A (FSD? activity only)
Lesson 3	To explore how the invention of reinforced concrete works.	Children will investigate the word 'reinforce'. They are introduced to W B Wilkinson's invention of reinforced concrete. They look at different ways that reinforced concrete has been used to build record-breaking buildings and go on to investigate the different ways to reinforce modroc or paper.	<ul style="list-style-type: none"> • Can children define the word reinforced? • Can children describe what reinforced concrete is? • Are children able to suggest ways to reinforce a material? 	<ul style="list-style-type: none"> • Slides • Modroc • Cocktail sticks • Teacher Notes 3A • Worksheet 3A/3B • Challenge Cards 3A/3B (FSD? activity only) • Newspaper (FSD? activity only) • Tape (FSD? activity only)
Lesson 4	To investigate the invention of the mackintosh.	Children look into the invention of waterproof fabric and following invention of the mackintosh. They look into the desirable properties that the fabric needed to have in order to be made into a waterproof coat. They then attempt to waterproof a piece of paper in order to make an origami boat, thinking about the properties that the paper needs to retain e.g. flexibility, foldable etc.	<ul style="list-style-type: none"> • Can children pick out features of a material that make it suitable for a purpose? • Are children able to think of design criteria to suit a purpose? • Can children evaluate the success of a product based on a set of design criteria? 	<ul style="list-style-type: none"> • Slides • Mackintosh coat (if possible) • Instruction Sheet 4A • Worksheet 4A/4B/4C • Worksheet 4D (FSD? activity only) • Teacher Notes (FSD? activity only)
Lesson 5	To reflect on the impacts that inventions have had on our lives.	Children reflect on the inventions that they have investigated so far and are introduced to a few more inventors and their creations. The children are challenged to think about which inventions have changed people's lives the most. They discuss the inventions and how things changed when they were created and how they could change things as they are developed in the future.	<ul style="list-style-type: none"> • Can children name a British inventor and their creation? • Can children reflect on how inventions have changed the world? • Can children design a new creation intended to solve an everyday problem? 	<ul style="list-style-type: none"> • Slides • Worksheet 5A/5B • Invention Cards 5A • Challenge Cards 5A (FSD? activity only) • Worksheet 5C (FSD? activity only)