



Knowledge Organiser	Subject: Design and Technology	Topic: British inventors	Year: 3
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<u>Key Knowledge</u> <u>Technical knowledge I have already learnt about inventions and inventors.</u> An inventor creates new models which have changed the way we live. They have come up with ideas for things like trains, cars, televisions, and even chocolate bars! How to be an inventor: Design Your Product: Draw or describe what your product will look like and how it will work. Think about colours, shapes, and materials to use. Make a Prototype: Create a simple model or version of your product using things like cardboard, paper, or play dough. Test Your Product: Ask friends or family to try out your invention and see if it works well and if they like it. Improve Your Product: Based on feedback, make changes to your product to make it even better. Present Your Product: Finally, showcase your product to others and explain why it's special and how it can be useful or enjoyable.	<u>Key Learning</u> What are British Inventors? Inventors are people who come up with new ideas and create things that have never been seen before. British inventors are people from Britain who have invented all sorts of amazing things that we use in our everyday lives! Why are British Inventors Important? British inventors have made a big impact on the world by creating things that help make our lives easier, safer, and more fun. They have invented things like the telephone, the light bulb, and even the internet! Famous British Inventors • Alexander Graham Bell invented the telephone, which we use to talk to our friends and family when they're far away. • Thomas Edison invented the light bulb, which brightens up our homes when it gets dark. • Tim Berners-Lee invented the World Wide Web, which allows us to find and share information online.	<u>Disciplinary Skills</u> • Generate ideas through brainstorming and identify a purpose for their product. • Draw up a specification for their design. • Select appropriate materials, tools and techniques. • Use skills in using different tools and equipment safely and accurately. • Evaluate a product against the original design specification. <table border="1" data-bbox="1216 555 2148 1469"> <tr> <th colspan="3">Key Concepts</th></tr> <tr> <td data-bbox="1216 630 1525 1469"> Design- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. </td><td data-bbox="1525 630 1836 1469"> Make- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities. </td><td data-bbox="1836 630 2148 1469"> Evaluate – Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals in design and technology have helped shape the world. </td></tr> </table>	Key Concepts			Design- Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.	Make- Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.	Evaluate – Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. Understand how key events and individuals in design and technology have helped shape the world.
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Key Vocabulary	
Architect	A person who is qualified to design buildings and to plan and supervise their construction.
Mackintosh	A full-length waterproof coat.
Telephone	A system for transmitting voices over a distance using wire or radio, by converting acoustic vibrations to electrical signals.
Inventor	A person who invented a particular process or device or who invents things as an occupation.
Inventions	The action of creating something, typically a process or device.
Waterproof	A garment, especially a coat, that keeps out water.
Concrete	A building material made from a mixture of broken stone or gravel, sand, cement, and water, which can be spread or poured into moulds and forms a mass resembling stone on hardening.
WWW	World Wide Web
Product	A product is something that is produced and sold in large quantities, often as a result of a manufacturing process.



Linking Thinking Across Our Learning Journey						
Early Years	Year One	Year Two	Year Three	Year Four	Year Five	Year Six
Celebrations- How things have changed / Junk modelling	Homes past and present/ Homes designing	Stable structures	British inventors	Story books	Building bridges	Making African instruments