

<p>Theme read:</p> <p>What do you do with an Idea? - Kobi Yamada</p> <p>Marveltown – Bruce McCall</p> <p>Girls Think of Everything by Catherine Thimmesh</p> <p>Extracts from - Weaving the Web: The Original Design and Ultimate Destiny of the World Wide Web by Tim Berners-Lee</p> <p>100 Inventions That Made History: Brilliant Breakthroughs That Shaped Our World – by T. Turner, A. Mills & C. Gifford</p> <p>Great Inventors from A to Z by Valter Vogato (Author), Annalisa Beghelli (Illustrator)</p>	<p>Year 5 Summer Enquiry Question</p> <h2 style="text-align: center;">What were the inventions that changed the world?</h2> <p>Key driver: Enthusiasm</p> <p>Key skills: I can identify and describe reasons for and results of, events, situations and changes.</p> <p>Year Enquiry: How has technology changed the world?</p> <p>Topics: Longitudinal study</p>	<p>Resources</p> <ul style="list-style-type: none"> • TED Ed talk: How inventions change history (for better and for worse) at https://www.youtube.com/watch?v=0SMNYivhGsc • http://shortsleeveandtieclub.com/the-top-10-inventions-of-all-time/ • https://www.telegraph.co.uk/technology/4985234/Top-10-innovations-that-should-have-changed-the-world-but-didnt-manage-it.html • https://curriculum.unitedlearning.org.uk/Curriculum?r=16207 • Inventors and Inventions – Black Dog Publishing
<p>Key Vocabulary:</p>		<p>Pupil Pledge</p>

<p>Launch</p> <p>Imagine someone invented a time machine and we could all be transported back to 1990! We would see a world without the internet. How would it look? Think how much life has changed in a generation. Go back another 30 years, and another 30 – no TV, no air travel. Consider how technology changes everything. What inventions do you think have been most important and</p>	<p>Lesson 2</p> <p>Oxford as a place of invention: Tim Berners-Lee went to Queen’s College – how did he invent the world wide web? Where does the www fit in in the history of computing? How does the invention of the printing press compare to the invention of the internet in its effect on the world? WALT: I can compare the significance of the invention of the printing press and the invention of the internet.</p>	<p>Lesson 3</p> <p>Was there a ‘golden age’ in science and technology? Look at Europe in the time of ancient Greece and Rome (use UL Hub Y5 Longitudinal study: Quest for Knowledge Lesson 1 PP). Contrast this with the following period - the Dark Ages (UL L2 PP). Can also compare this period to the advances learned about in the Early Islamic Civilisation topic.</p>	<p>Lesson 4</p> <p>The Industrial Revolution – looking at some of the significant ideas and inventions of the late 1700s/early 1800s (use UL Hub Y5 Lesson 4 PP) WALT: I can describe the benefits of the spinning jenny, the steam engine and the steam railway. Outcome: Chdn can describe the benefits of the spinning jenny, the steam engine and the steam railway.</p>	<p>POP Quiz</p> <p>Chdn to complete an ‘online quiz’ on the technologies looked at in the topic so far.</p>
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<p>why? E.g. wheel, compass, car, train, concrete, electricity, printing press? Look at http://shortsleeveandtieclub.com/the-top-10-inventions-of-all-time/ - do you agree with these?</p> <p>WALT: I can compare famous inventions and explain how they are historically important.</p> <p>Outcome: Chdn to make a list of famous inventions, explaining the significance/impact of each.</p>	<p>Outcome: Chdn to see how Tim B-L only one on a line of significant people in the history of computing. Chdn to see how women such as Ada Lovelace, Grace Hopper and Hedy Lamarr played important roles in the evolution of computers (See twinkl PP)</p> <p>Chdn to make a comparative table how the printing press and the internet changed the world in different ways. Have they had similar effects in terms of the democratisation of information/knowledge?</p>	<p>WALT: I can talk about the discoveries and inventions in the Western 'golden age' and contrast with the Dark Ages.</p> <p>Outcome: chdn to group inventions/discoveries of early history and discuss difficulty in putting early discoveries on a timeline. How do some of these early discoveries lay the foundations for later advances?</p>		
<p>Lesson 6 Victorian Inventions. Their place in wider context of Victorian England. UL Hub L5 looks at Great Exhibition 1851 & discusses industrialisation and urbanisation. Use twinkl Victorian Inventions fact cards to discuss things like photographs, electric telegraph, rubber tyres, Christmas cards.</p> <p>WALT: I can find out about and evaluate nineteenth century inventions.</p> <p>Outcome: Chdn to choose 3 inventions they consider the most important and say why, writing the pros and cons of each.</p>	<p>Lesson 7 Context – do inventions have to be thought of at the right time for them to succeed? Da Vinci's helicopter – what else did he think of? Thomas Edison – lightbulb moment or business opportunity? What about Tesla? What other inventions were shaped by profit over innovation? What inventions came about by 'accident', such as consumer goods as the result of the space race?</p> <p>WALT: Look at how significant changes in technology can be dependent on their circumstances.</p> <p>Outcome: Chdn to choose an invention from the past and come up with marketing campaigns – posters, tag lines, logos – to</p>	<p>Lesson 8 Why are women under-represented in any list of inventors? Look at Rosalind Franklin's work on DNA, Ada Lovelace's work on the Analytical Engine (computer), Margaret Hamilton's work on programming code for NASA's Apollo missions.</p> <p>WALT: I can use the internet and books to research women inventors and recall relevant facts.</p> <p>Outcome: Chdn to research and make mini-fact files on significant women inventors and position them on a time line.</p>	<p>Lesson 9 Are inventions always beneficial? Look at TED Ed talk: How inventions change history (for better and for worse) at https://www.youtube.com/watch?v=OSMNYivhGsc</p> <p>Should we have invented the gun? The sewage system?</p> <p>WALT: Consider the longer-term impact of inventions in history.</p> <p>Outcome: Chdn to write and make short speeches 'for' and 'against' different inventions and class vote on the debates.</p>	<p>Celebration Representations (pictures, drawings, models) of some of the most famous inventions as a science Museum display, with accompanying fact file labels.</p>

	appeal to the people who were the 'market' at the time.			
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<p>Content: What will we learn? What are the core concepts?</p> <ul style="list-style-type: none"> • Develop a chronologically secure knowledge and understanding of British and world history. • Note connections, contrasts and trends over time. • Address questions about change, cause, similarity and difference and significance. • Identify and use primary and secondary sources using the library and internet. • Construct informed responses that recall, select and organise relevant historical information. 	<p>Coherence: How does this link to previous learning?</p> <ul style="list-style-type: none"> • Compare to the scientific advances learned about in the Early Islamic Civilisation topic in Y5 Autumn. • Review in lesson 3 of technology across Dark Ages links to study of Anglo-Saxons and Vikings in Y4. • Technological advance follows on from topic on local impact of motor car industry. 	<p>Creativity: How will we show we understand in multiple ways?</p> <ul style="list-style-type: none"> • Design a new invention in groups and explore how this could impact on people's lives positively and negatively. • Come up with marketing campaigns for inventions of the past – posters, tag lines, logos – to appeal to the people who were the 'market' at the time. 	<p>Compassion: What opportunities are there to teach compassion?</p> <ul style="list-style-type: none"> • Consider the effect various inventions have had on humanity. In what ways have they had negative consequences (e.g. pollution, unemployment)? Were these known. Is this the same as being intentional? • Does the pursuit of knowledge always need to be seen through an ethical lens? 	<p>Community: What links are there to local resources?</p> <ul style="list-style-type: none"> • Oxford Science Museum. • Queen's College/Oxford University. •
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- X-rays (discovered in 1895): Wimshurst machine, bought in 1898 by a cousin of Churchill, used in Boer War to aid medics in finding shrapnel in injured soldiers.
- Penicillin – discovered by Alexander Fleming but turned into a clinical product for patients in Oxford during WW2.
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