



**(38 sessions a year)**

|                         | <b>Reception</b>  | <b>Year 1</b>  | <b>Year 2</b>  | <b>Year 3</b>   | <b>Year 4</b>   | <b>Year 5</b>   | <b>Year 6</b>  |
|-------------------------|---|--|--|---|---|---|--|
| <b>Online safety</b>    | <a href="#">Online Safety EYFS</a><br>Before you click on something make sure you stop and think                                  | <a href="#">Online Safety Y1</a><br>Learning how to stay safe online and how to manage feelings and emotions when someone or something has upset us.                                     | <a href="#">Online Safety Y2</a><br>Learning: how to keep information safe and private online; who we should ask before sharing things online and how to give, or deny permission online | <a href="#">Online Safety Y3</a><br>Learning: the difference between fact, opinion and belief; and how to deal with upsetting online content. Knowing how to protect personal information online.   | <a href="#">Online Safety Y4</a><br>Searching for information and making a judgement about the probable accuracy; recognising adverts and pop-ups; understanding that technology can be distracting.  | <a href="#">Online Safety Y5</a><br>Learning about app permissions; the positive and negative aspects of online communication; that online information is not always factual; how to deal with online bullying and managing our health and wellbeing.   | <a href="#">Online Safety Y6</a><br>Learning to deal with issues online; about the impact and consequences of sharing information online; how to develop a positive online reputation; combating and dealing with online bullying and protective passwords.  |
| <b>Systems and Data</b> | <a href="#">Data Handling EYFS</a><br>Children sort and categorise data and are introduced to branching databases and pictograms. | <a href="#">Introduction to data Y1</a><br>Learning what data is and the different ways it can be represented. Learning why data is useful and the ways it can be gathered and recorded. | <a href="#">Data Handling Y2</a><br>Learning how data is collected, used and displayed and the scientific learning of the conditions needed for plants and humans, to survive            | <a href="#">Networks Y3</a><br>Learning what a network and how devices communicate and share information.<br><br><a href="#">Emailing skills Y3</a><br>Sending emails with attachments and understanding what cyberbullying is.<br><br><a href="#">Journey Inside a Computer</a><br>Assuming the role of computer parts and | <a href="#">Google</a><br>Learning how to work collaboratively and exploring a range of collaborative tools.<br><br><a href="#">Website Design</a><br>Learning how web pages and sites are created and how to embed media and links.<br><br><a href="#">HTML Skills</a><br>Learning about the markup language behind a webpage; | <a href="#">Music Programming</a><br>Building-on programming and music skills to create different sounds, beats and melodies which are put to the test with a Battle of the Bands performance!<br><br><a href="#">Data Handling</a><br>Learning about the Mars Rover, exploring how and why it transfers data including instructions, | <a href="#">Bletchley Park</a><br>Discovering the history of Bletchley and learning about code breaking and password hacking. Demonstrating digital literacy skills by creating presentations.<br><br><a href="#">Big data</a><br>Identifying how barcodes and QR codes work. Learning how infrared waves are used for the |

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|                           |  |  |  | <p>creating paper versions of computers to consolidate understanding of how a computer works.</p> <p><a href="#">Database Skills</a><br/>Learning about records, fields and data and sorting and filtering data.</p> | <p>becoming familiar with HTML tags, changing HTML and CSS code to alter images and 'remix' a live website.</p> <p><a href="#">Data Handling</a><br/>Researching and storing data on spreadsheets and designing a weather station.</p> | <p>and how messages can be sent using binary code.</p>   | <p>transmission of data while recognising the uses of RFID.</p>   |
| <b>Program ming</b>       | <p><a href="#">Using Instructions</a><br/>The children learn to receive and give instructions and understand the importance of precise instructions.</p> | <p><a href="#">Algorithms</a><br/>Algorithms, decomposition and debugging are made relatable to familiar contexts, following directions, learning why instructions need to be specific.</p> <p><a href="#">Programming</a><br/>Introducing programming through the use of a Bee-Bot and exploring its functions.</p> | <p><a href="#">Algorithms and debugging</a><br/>Developing an understanding of; what algorithms are, how to program them and how they can be developed to be more efficient, introduction of loops.</p> <p><a href="#">Programming</a><br/>Exploring what 'blocks' do' by carrying out an informative cycle of predict &gt; test &gt; review. Programming a familiar story and make a musical instrument</p> | <p><a href="#">Programming</a><br/>Exploring the programme Scratch, following the predict &gt; test &gt; review cycle. Learning about 'loops' and programming an animation, story and game</p>                       | <p><a href="#">Programming</a><br/>Revisiting the key features and beginning to use 'variables' in code scripts.</p>   | <p><a href="#">Microbit Programming</a><br/>Creating algorithms and programs that are used in the real world. Using the 'predict, test and evaluate' cycle to create and debug programs with specific aims</p> | <p><a href="#">Big data 2</a><br/>Further developing understanding of how networks and the Internet are able to share information. Learning how big data can be used to design smart buildings.</p> |
| <b>Hardware and media</b> | <p><a href="#">Using a Computer</a><br/>Learning about the main parts of a computer and</p>  | <p><a href="#">Mouse Skills</a><br/>Learning how to login and navigate around a computer;</p>  | <p><a href="#">Word Processing Skills</a><br/>Developing touch typing skills, learning keyboard shortcuts</p>  | <p><a href="#">Video trailers</a><br/>Developing digital video skills to create trailers, with special</p>   | <p><a href="#">Computational Thinking</a><br/>Solving problems effectively using the</p>   | <p><a href="#">Stop-motion animation</a><br/>Creating animations, storyboard ideas and</p>   | <p><a href="#">Intro to Python</a><br/>Using the programming language 'Python' to</p>   |

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|  | <p>how to use the keyboard and mouse. Learning how to log in and out.</p> <p><a href="#">Computers and Cameras</a></p> <p>Tinkering and exploring with different computer hardware and learning to operate a camera.</p> | <p>developing mouse skills; learning how to drag, drop, click and control a cursor to create works of art</p> <p><a href="#">Rocket to the Moon</a></p> <p>Developing keyboard and mouse skills through designing, building and testing. Creating a digital list of materials, using drawing software and recording data.</p> | <p>and simple editing tools.</p> <p><a href="#">Stop-motion animation</a></p> <p>Learning how to create simple animations from storyboarding creative ideas.</p> | <p>effects and transitions.</p> | <p>four areas of abstraction, algorithm design, decomposition and pattern recognition.</p> | <p>decomposing a story into small parts before putting together to create the illusion of a moving image.</p> | <p>create designs and art. Learning how to create loops and nested loops to make their code more efficient.</p> <p><a href="#">History of Computers</a></p> <p>Writing, recording and editing radio plays set during WWII, learning about how computers have evolved.</p> |
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