

Computing LTP	Autumn 1:	Autumn 2:	Spring 1:	Spring 2:	Summer 1:	Summer 2:
Reception	Using technology in role-play e.g. phones, computers and keyboards, washing machines. Listening to music. Watching information video clips.	Taking a photo using an ipad.	Recording and creating videos of retelling traditional tales.	Understand how technology is used in their everyday lives	Searching for information on the internet.	Exploring mechanical toys and using beebots. Giving step by step instructions
Year 1	<p>Improving mouse skills (5 lessons) Learning how to login and navigate around a computer; developing mouse skills; learning how to drag, drop, click and control a cursor to create works of art</p> <p>CONDENSED: L1-3</p> <p>Online Safety Using the internet safely</p>	<p>Algorithms unplugged (5 lessons) Algorithms, decomposition and debugging are made relatable to familiar contexts, following directions, learning why instructions need to be specific.</p> <p>CONDENSED: L1, 2 , 4 and 5 only</p> <p>Online Safety Online emotions</p>	<p>Rocket to the moon (5 lessons) Developing keyboard and mouse skills through designing, building and testing. Creating a digital list of materials, using drawing software and recording data.</p> <p>Online Safety Always be kind and considerate</p>	<p>Espresso coding (5 lessons) On the move x 2 Simple inputs x 2 Debugging x 1</p> <p>CONDENSED: L1-4</p> <p>Online Safety Posting and sharing online</p>	<p>Digital imagery (5 lessons) Taking and editing photos, searching for and adding images to a project.</p> <p>CONDENSED: L1-3</p>	<p>Introduction to data (5 lessons) 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.</p>

<p>Year 2</p>	<p><u>What is a computer?</u> (5 lessons) Exploring what a computer is by identifying how inputs and outputs work and how computers are used in the wider world to design their own computerised invention.</p> <p>CONDENSED: L1,2 AND 5</p> <p>Online Safety What happens when I post online?</p>	<p><u>Algorithms and debugging</u> (5 lessons) Developing an understanding of; what algorithms are, how to program them and how they can be developed to be more efficient.</p> <p>CONDENSED: L1,2,4 AND 5</p> <p>Online Safety How do I keep my things safe online?</p>	<p><u>Word processing</u> (5 lessons) Developing touch typing skills, learning keyboard shortcuts and simple editing tools.</p> <p>Online Safety Who should I ask?</p>	<p><u>Espresso coding</u> (5 lessons) Different sorts of inputs x 2 Buttons and directions x 2 Debugging x 1</p> <p>CONDENSED: L1-4</p> <p>Online Safety It's my choice</p>	<p><u>Stop Motion</u> (5 lessons) Using tablet devices, learn how to create simple animations from storyboarding creative ideas.</p> <p>Online Safety Is it true?</p>	<p><u>International Space Station</u> (5 lessons) Learning how data is collected, used and displayed and the scientific learning of the conditions needed for plants and humans to survive.</p> <p>CONDENSED: L1,3 AND 5</p>
<p>Year 3</p>	<p><u>Networks and the internet</u> (5 lessons) Learning what a network is and how devices communicate and share information.</p> <p>CONDENSED: L1,3 AND 5</p> <p>Online Safety Beliefs, opinions and facts on the internet</p>	<p><u>Espresso coding</u> (5 lessons) Sequence and animation x 2 Conditional events x 2 Debugging x 1</p> <p>CONDENSED: L1-4</p> <p>Online Safety When being online makes me upset</p>	<p><u>Word processing</u> (5 lessons) TBC</p> <p>Online Safety Sharing of information</p>	<p><u>Video trailers - iPads</u> (5 lessons) Developing digital video skills to create trailers, with special effects and transitions.</p> <p>CONDENSED: L1-4</p> <p>Online Safety Rules of social media platforms</p>	<p><u>Journey inside a computer</u> (5 lessons) Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.</p> <p>CONDENSED: L1,2 AND 5</p> <p>Online Safety Assessment</p>	<p><u>Comparison cards databases</u> (5 lessons) Learning about records, fields and data and sorting and filtering data.</p>

<p>Year 4</p>	<p><u>Collaborative learning</u> (5 lessons) Learning how to work collaboratively and exploring a range of collaborative tools.</p> <p>CONDENSED: L1,3,4 AND 5</p> <p>Online Safety What happens when I search online?</p>	<p><u>Scratch</u> (5 lessons) - Scratch reminder - Identify scratch code - Introduction to variables - making a variable - Times tables project</p> <p>Online Safety How do companies encourage us to buy online?</p>	<p><u>Website design</u> (5 lessons) Learning how web pages and sites are created and how to embed media and links.</p> <p>Online Safety Fact, opinion or belief?</p>	<p><u>HTML</u> (5 lessons) Learning about the markup language behind a webpage; becoming familiar with HTML tags, changing HTML and CSS code to alter images and 'remix' a live website.</p> <p>Online Safety What is a bot?</p>	<p><u>Computational thinking</u> (5 lessons) Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.</p> <p>CONDENSED: L1-4</p> <p>Online Safety What is my #TechTimetable like?</p>	<p><u>Investigating weather</u> (5 lessons) Researching and storing data on spreadsheets and designing a weather station.</p> <p>CONDENSED: L1,3,4 AND 5</p>
<p>Year 5</p>	<p><u>Search engines</u> (5 lessons) Learning about how page rank works and how to identify inaccurate information.</p> <p>CONDENSED: L1-4</p> <p>Online Safety Online protection</p>	<p><u>Programming music</u> (5 lessons) Scratch 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!</p> <p>CONDENSED: L1-4</p> <p>Online Safety Online communication</p>	<p><u>Mars Rover 1</u> (5 lessons) Learning about the Mars Rover, exploring how and why it transfers data including instructions, and how messages can be sent using binary code.</p> <p>CONDENSED: L1,2, AND 4</p> <p>Online Safety Online reputation</p>	<p><u>Micro:bit (5 lessons)</u> 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>Online Safety Online bullying</p>	<p><u>Stop motion animation</u> (5 lessons) Creating animations, storyboard ideas and decomposing a story into small parts before putting it together to create the illusion of a moving image.</p> <p>CONDENSED: L1-4</p> <p>Online Safety Online health</p>	<p><u>Mars Rover 2</u> (5 lessons) Exploring how the Mars rover: moves, follows instructions, collects and sends data; understanding how computers work, what data is and how it is transferred.</p> <p>Online Safety</p>

Year 6	<p><u>Big data 1</u> (5 lessons) Identifying how barcodes and QR codes work. Learning how infrared waves are used for the transmission of data while recognising the uses of RFID.</p> <p>CONDENSED: L1,3,4 AND 5</p> <p><u>Online Safety</u> Life online</p>	<p>Programming: <u>Intro to Python</u> (5 lessons) Using the programming language 'Python' to create designs and art. Learning how to create loops and nested loops to make their code more efficient.</p> <p>CONDENSED: L1-4</p> <p><u>Online Safety</u> Sharing online</p>	<p><u>Bletchley Park</u> (5 lessons) Discovering the history of Bletchley and learning about code breaking and password hacking</p> <p>CONDENSED: L1-3</p> <p><u>Online Safety</u> Creating a positive reputation</p>	<p><u>History of computers</u> (5 lessons) Writing, recording and editing radio plays set during WWII, learning about how computers have evolved.</p> <p>CONDENSED: L3,4 AND 5</p> <p><u>Online Safety</u> Capturing evidence</p>	<p><u>Programming</u> Python 2</p> <p><u>Online Safety</u> Password protection</p>	<p><u>Inventing a product</u> (5 lessons) Designing a product, pupils: evaluate, adapt and debug code to make it suitable for their needs and designing products in CAD and creating a website and video.</p> <p><u>Online Safety</u> Think before you click</p>
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