



Computing Long Term Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	<p>Digital Literacy Self-image and online reputations Identifying what identify is and exploring how this can be shown safely online</p> <p>Computer Science Key concept: Simple sequences Looking at sequences in everyday life then using the idea of following instructions to complete an Animal Challenge on Scratch</p>	<p>Digital Literacy Online relationships Recognising different forms of communication, identifying some risks of using them and explaining the difference between knowing someone online and offline</p> <p>IT Skills Word processing Understanding how to log onto laptops and save learning in folders, as well as developing Level 2 touch typing. Beginning to explore Microsoft Word, learning how to change font, align text and insert text boxes. Using Microsoft Word to insert tables, images, shapes and screenshots</p>	<p>Digital Literacy Online bullying Explaining what bullying is and describing rules about how to behave online</p> <p>Computer Science Key concept: Timed sequences Exploring fast and slow coding blocks before applying to a conversation task on Scratch</p>	<p>Digital Literacy Health, well-being and lifestyle Explaining why spending too much time on technology can be negative and recognising activities on technology that can be easy to spend a lot of time on</p> <p>IT Skills Exploring apps Recognising how learning can be presented on I Can Animate, Do Ink Green Screen, iMovie and Chrome Music Lab</p>	<p>Digital Literacy Privacy and security & copyright and ownership Explaining why copying someone else's work can cause problems, giving examples of what they might be</p> <p>Computer Science Ladybug Munch Completing the application of simple sequences and timed sequences to complete the task Ladybug Munch</p>	<p>Digital Literacy Manging online information Recognising why information should only be shared with trusted people, giving reasons why passwords are important and describing how connected devices can get personal information</p> <p>IT Skills PowerPoint presentations Creating title pages and changing the style of PowerPoint slides. Web research Understanding the difference between factual websites and blogs</p>
Year 4	<p>Digital Literacy Self-image and online reputations Describing the ways online and offline identity can vary, explaining that this can be used to find out information about themselves</p> <p>IT Skills App skills Recognising how learning can be presented on Explain Everything, Pages and iMovie Trailer</p>	<p>Digital Literacy Online relationships Describing ways of staying safe and having fun online by showing respect</p> <p>Computer Science Key concept: Counted loops Being introduced to what a controlled loop is and where it can fit into an algorithm before then applying it to the 2D shape challenge on Scratch</p>	<p>Digital Literacy Online bullying Identifying where bullying can take place online, thinking why people need to think carefully about what they post online</p> <p>IT Skills Web research Learning how to use shortcuts on Google to find unknown information. Publisher Using Microsoft Publisher to create posters, inserting images and fonts</p>	<p>Digital Literacy Health, well-being and lifestyle Identifying how technology can distract people from other things, suggesting strategies to help limit time on it</p> <p>Computer Science Key concept: Indefinite loops Exploring forever loops and how they impact algorithms and sequences before then completing the Fish Tank task</p>	<p>Digital Literacy Privacy and security & copyright and ownership Recognising who owns content on the internet and whether people have the right to use it</p> <p>IT Skills PowerPoint presentation Creating multiples slides on PowerPoints using a range of animations and transitions</p>	<p>Digital Literacy Managing online information Explaining what a strong password is, understanding that others might pretend to be others online and why they might do this</p> <p>Computer Science MicroBit Boards Using MicroBit software to code lights and the pushing of buttons on MicroBit boards</p>

<p>Year 5</p>	<p><u>Digital Literacy</u> Self-image and online reputations Recognising that online identity can be copied or modified, demonstrating responsible choices about how to create a positive online reputation that others might make judgements on</p> <p><u>IT Skills</u> Manipulating images Using software to manipulate images and recognising how and why people may do this online</p> <p><u>Computer Science</u> Crumble moon buggy Using Crumble software to code a physical output (motor) to get a moon buggy to move around a given course</p>	<p><u>Digital Literacy</u> Online relationships Recognising that some people online may want to cause harm to people and how we can contribute positivity in online communities</p> <p><u>IT Skills</u> Spreadsheets Understanding what a cell is, using formula to calculate cells, exploring conditional formatting, inserting graphs and applying knowledge to a real-life problem of manging money and data</p>	<p><u>Digital Literacy</u> Online bullying Recognising how someone is feeling through what they post online and how to report, block and use helpline services to share any concerns</p> <p><u>IT Skills</u> Leaders Award Participating in a STEM challenge to explore the world of engineers, considering problems and design solutions that could solve them using a range of scientific knowledge, design skills as well as a variety of software</p>	<p><u>Digital Literacy</u> Health, well-being and lifestyle Exploring ways that technology can impact sleep and describe some strategies, advice and tips to promote a healthy balance to aid good sleep patterns</p> <p><u>Computer Science</u> Key concept: Condition starts action in a loop and switches between actions Applying the knowledge of flow charts to the software Flowol to control a programme such as traffic lights or a lighthouse</p>	<p><u>Digital Literacy</u> Privacy and security & copyright and ownership Creating strong passwords, recognising how free apps use personal information and why some apps may request payment which we should seek permission from a trusted adult for</p> <p><u>Computer Science</u> Key concept: Making choices Applying a knowledge of conditional coding to create a game on Scratch where you catch the fish and save them from the pollution in the game 'Ocean Pollution'</p>	<p><u>Digital Literacy</u> Managing online information Evaluating content online and distinguishing between information, mis-information and dis-information</p> <p><u>IT Skills</u> Computer networks Learning what a network is and how it is used in school</p> <p><u>Email</u> Learning how to send emails, replying to emails, sending attachments and recognising spam</p>
<p>Year 6</p>	<p><u>Digital Literacy</u> Self-image and online reputations Recognising how media can shape ideas about gender, identifying how these can make people feel offline and how they feel they have to present themselves online</p> <p><u>Computer Science</u> Key concept: Basic procedures Beginning to explore incorporating 'define' details into basic procedures before then writing their own algorithms</p>	<p><u>Digital Literacy</u> Online relationships Explore interactions online including trolling and ghosting before then learning about what AI is and how it learns information</p> <p><u>IT Skills</u> LeoCAD Using CAD software to create 3D computer aided designs</p> <p><u>Computer Science</u> Crumble shop windows Using Crumble software to code physical outputs simultaneously (lights and motor) to light their DT pulley creation</p>	<p><u>Digital Literacy</u> Online bullying Explaining how to capture evidence of cyberbullying and how to use these to support people in reporting problems</p> <p><u>Computer Science</u> Key concept: Nested loops Understanding and applying the knowledge of inner loops and outer loops within nests to repeat parts of algorithms when drawing shapes</p>	<p><u>Digital Literacy</u> Health, well-being and lifestyle Understanding age-regulated content, how technology can impact lifestyle and explaining the importance of self-regulation and the impact of not following this</p> <p><u>IT Skills</u> Web publishing Designing and publishing a website that reflects a knowledge of what is safe to post online</p>	<p><u>Digital Literacy</u> Privacy and security & copyright and ownership Using a range of strong passwords, understanding how to manage these, explaining permissions that certain apps require and how some companies target specific online content to gain money illegally</p> <p><u>IT Skills</u> Databases Understanding how to information is stored online and have databases can be sorted through using different filters</p>	<p><u>Digital Literacy</u> Managing online information Explaining how search engines work, defining the terms 'influence', 'manipulation' and 'persuasion', identifying how these can be a problem online</p> <p><u>IT Skills</u> PowerPoint vs. Prezi Using the software PowerPoint and Prezi software to create presentations, evaluating which is preferred and why</p>