

Michael Faraday: Computing Curriculum Map

Computing	Key Skills	Autumn	Spring	Summer
Year 1	<p>Computer Science</p> <ul style="list-style-type: none"> I can understand what algorithms are. I can create simple programs <p>Information Technology</p> <ul style="list-style-type: none"> I can use technology purposefully to create digital content. I can use technology purposefully to store digital content. I can use technology purposefully to retrieve digital content. <p>Digital Literacy</p> <ul style="list-style-type: none"> I can use technology safely. I can keep personal information private. I can recognise common uses of information technology beyond school. 	<p>Espresso Coding Unit 1A Twinkl Online Safety</p> <ul style="list-style-type: none"> Owning your creative work Safe image searching <p>Cross Curricular Computing Project</p>	<p>Espresso Coding Unit 1B Twinkl Online Safety</p> <ul style="list-style-type: none"> Staying smart online My personal information <p>Cross Curricular Computing Project</p>	<p>Espresso Free Code Twinkl Online Safety</p> <ul style="list-style-type: none"> What is email? Keeping Zibb safe online <p>Cross Curricular Computing Project</p>
Year 2	<p>Computer Science</p> <ul style="list-style-type: none"> I can understand that algorithms are implemented as programs on digital devices I can understand that programs execute by following precise and unambiguous instructions I can debug simple programs I can use logical reasoning to predict the behaviour of simple programs <p>Information Technology</p> <ul style="list-style-type: none"> I can use technology purposefully to organise digital content I can use technology purposefully to manipulate digital content <p>Digital Literacy</p> <ul style="list-style-type: none"> I can use technology respectfully I can identify where to go for help and support when I have concerns about content or contact on the internet or other online technologies 	<p>Espresso Coding Unit 2A Twinkl Online Safety</p> <ul style="list-style-type: none"> Digital footprints Key words <p>Cross Curricular Computing Project</p>	<p>Espresso Coding Unit 2B Twinkl Online Safety</p> <ul style="list-style-type: none"> You be the judge Rate and review <p>Cross Curricular Computing Project</p>	<p>Free Code Twinkl Online Safety</p> <ul style="list-style-type: none"> Being kind online Cyber snakes and ladders <p>Cross Curricular Computing Project</p>
Year 3	<p>Computer Science</p> <ul style="list-style-type: none"> I can write programs that accomplish specific goals I can use sequence in programs I can work with various forms of input I can work with various forms of output <p>Information Technology</p> <ul style="list-style-type: none"> I can use search technologies effectively I can use a variety of software to accomplish given goals I can collect information I can design and create content I can present information <p>Digital Literacy</p> <ul style="list-style-type: none"> I can use technology responsibly I can identify a range of ways to report concerns about contact 	<p>Espresso Coding Unit 3A Twinkl Online Safety</p> <ul style="list-style-type: none"> What is cyberbullying? To buy or not to buy? <p>Cross Curricular Computing Project</p>	<p>Espresso Coding Unit 3B Twinkl Online Safety</p> <ul style="list-style-type: none"> Keep it to yourself? Emailing <p>Cross Curricular Computing Project</p>	<p>Free Code Twinkl Online Safety</p> <ul style="list-style-type: none"> Online communication Party planners <p>Cross Curricular Computing Project</p>
Year 4	<p>Computer Science</p> <ul style="list-style-type: none"> I can design programs that accomplish specific goals I can design and create program I can debug programs that accomplish specific goals I can use repetition in programs I can control or simulate physical systems I can use logical reasoning to detect and correct errors in programs I can understand how computer networks can provide multiple services, such as the world wide web I can appreciate how search results are selected <p>Information Technology</p> <ul style="list-style-type: none"> I can select a variety of software to accomplish given goals I can select, use and combine internet services I can analyse information I can evaluate information I can collect data I can present data <p>Digital Literacy</p> <ul style="list-style-type: none"> I can understand the opportunities computer networks offer for communication I can identify a range of ways to report concerns about content I can recognize acceptable / I can unacceptable behaviour 	<p>Espresso Coding Unit 4A Twinkl Online Safety</p> <ul style="list-style-type: none"> Cyber bullying Supersearchers <p>Cross Curricular Computing Project</p>	<p>Espresso Coding Unit 4B Twinkl Online Safety</p> <ul style="list-style-type: none"> Copycats! Too much information <p>Cross Curricular Computing Project</p>	<p>Free Code Twinkl Online Safety</p> <ul style="list-style-type: none"> The online community Cyber superheroes <p>Cross Curricular Computing Project</p>
Year 5	<p>Computer Science</p> <ul style="list-style-type: none"> I can solve problems by decomposing them into smaller parts I can use selection in programs I can work with variables I can use logical reasoning to explain how some simple algorithms work I can use logical reasoning to detect and correct errors in algorithms I can understand computer networks including the internet I can appreciate how search results are ranked <p>Information Technology</p> <ul style="list-style-type: none"> I can combine a variety of software to accomplish given goals I can select, use and combine software on a range of digital devices I can analyse data I can evaluate data I can design and create systems <p>Digital Literacy</p> <ul style="list-style-type: none"> I can understand the opportunities computer networks offer for collaboration I can be discerning in evaluating digital content 	<p>Espresso Coding Unit 5A Twinkl Online safety</p> <ul style="list-style-type: none"> Spam Sites to cite <p>Cross Curricular Computing Project</p>	<p>Espresso Coding Unit 5B Twinkl Online safety</p> <ul style="list-style-type: none"> Powerful passwords False photography <p>Cross Curricular Computing Project</p>	<p>Espresso Free Code Twinkl Online Safety</p> <ul style="list-style-type: none"> Online safety story Online safety comics <p>Cross Curricular Computing Project</p>
Year 6	<p>Computer Science</p> <ul style="list-style-type: none"> I can use computational abstractions I can model state of real world problems I can use a programming language to solve computational problems Understand simple Boolean logic Understand how numbers can be represented in binary I can understand the hardware components that make up computer systems I can understand how text can be represented digitally in the form of binary digits I can understand how pictures can be represented digitally in the form of binary digits <p>Information Technology</p> <ul style="list-style-type: none"> I can undertake creative projects with challenging goals I can use multiple applications I can work with applications across a range of devices I can collect data <p>Digital Literacy</p> <ul style="list-style-type: none"> I can understand a range of ways to use technology respectfully I can recognise inappropriate content I know how to report concerns I can reuse digital artefacts for a given audience I can attend to usability of digital artefacts I can understand a range of ways to use technology safely 	<p>Espresso Coding Unit 6A Twinkl Online Safety</p> <ul style="list-style-type: none"> Cyberbullying Secure websites <p>Cross Curricular Computing Project</p>	<p>Espresso Coding Unit 6B Twinkl Online Safety</p> <ul style="list-style-type: none"> People online Girls and boys online <p>Cross Curricular Computing Project</p>	<p>Discovery Education HTML/Python Twinkl Online Safety</p> <ul style="list-style-type: none"> SMARTbots Online safety let's get quizzical! <p>Cross Curricular Computing Project</p>