














# Computing Curriculum Overview

	Autumn	Spring	Summer
Year 1	<p><b>Digital Art</b></p> <p>How can I make marks on a screen?            How can I use lines to create a shape?            How do I use the shape tool?            How can I change the brush effects to create a picture?            How can I create a picture using different sized dots?</p>	<p><b>Programming</b></p> <p>Can I create instructions using pictures?            Why is it important to be precise when writing an algorithm?            Can I write instructions to programme a person like a computer?            Can I program a Bee Bot to move?            Can I debug a Bee Bot?            Can I program a sequence to make a Bee Bot move?</p> 	<p><b>Word Processing</b></p> <p>Can I type on a keyboard?            Can I edit text?            Can I select and format text?            Can I input data to make a pictogram?            Can I collect data and make a pictogram?</p> 
Year 2	<p><b>Animation</b></p> <p>How do I log in to my Chromebook?            What is an animation?            How do I access J2E?            How do I make an animation on J2E?            How do I add sound to my animation?</p> <p><b>Data Handling</b></p> <p>What data can I show in a bar graph?            What data can I show in a Venn diagram?            How do I put my writing on a computer?</p> 	<p><b>Presentations</b></p> <p>How can I create a picture?            What can I include in my presentation?            How can I add information to my presentation?            How can I add pictures to my presentation?            How can I be safe online?</p>	<p><b>Programming</b></p> <p>How can I decompose a game to predict what algorithms are used?            How can a computer understand algorithms to make a prediction?            What is debugging?            What algorithms can I plan that will solve problems?            What is a loop?</p> 

<p>Year 3</p>	<p><b>Presenting Information</b></p> <p>Can I login to a Chromebook and Google Classroom?</p> <p>Can I start to touchtype?</p> <p>Can I login and out of my email?</p> <p>Can I send an email?</p> <p>Can I reply to an email?</p> <p>Can I add an attachment to an email?</p> <p>Can I insert slides and titles into a presentation?</p> <p>Can I insert text into a presentation?</p> <p>Can I insert pictures and sound into a presentation?</p> <p>Can I improve the layout of a presentation?</p> <p>Can I use Google Classroom to comment on a presentation?</p>	<p><b>Programming</b></p> <p>Can I explain the risks of talking to people I don't know online?</p> <p>Can I create a Scratch account?</p> <p>What is Scratch?</p> <p>Can I use repetition (a loop) in an algorithm?</p> <p>What is decomposition?</p> <p>Can I tell a story using code?</p> 	<p><b>Data and Information</b></p> <p>How do digital devices work?</p> <p>What is a database?</p> <p>What is the difference between paper and computerised databases?</p> <p>Can I sort, filter and interpret data in a spreadsheet?</p> <p>Can I represent data in different ways?</p> <p>Can I use my database skills to plan a holiday?</p> 
<p>Year 4</p>	<p><b>Programming</b></p> <p>What key features of Scratch can I recall?</p> <p>How does a Scratch game work? and how can I decompose it?</p> <p>How can I decompose 'Scratch Ice Kingdom'?</p> <p>What is a variable?</p> <p>How do I make a variable?</p> 	<p><b>Presenting Information</b></p> <p>How can software be used collaboratively online to work as a team?</p> <p>Can I contribute to teamwork sensibly and responsibly?</p> <p>How can I contribute to someone else's work effectively?</p> <p>How can I use collaborative word processing software to make suggestions or comment on someone else's work?</p> <p>How can I create effective presentations?</p> <p>Can I use a variety of different slide styles to convey information including images and transitions?</p> 	<p><b>The Internet</b></p> <p>What does networking mean?</p> <p>How does the internet show connections?</p> <p>Is the information we see always reliable?</p> <p>What is a digital footprint?</p> <p>How can we be respectful online?</p> <p>Why is it important we stay safe online?</p> <p><b>Data and Information</b></p> <p>What is data collection?</p> <p>What is a spreadsheet?</p> <p>Can I understand what data collection looks like?</p> <p>Can I create my own multiple choice questionnaire?</p> <p>Can I collect my own data and evaluate it?</p> 

<p>Year 5</p>	<p><b>Sharing Information</b>  Can children recognise the role of computers in our everyday lives?  How is information transferred over the internet?  How do I use computers in my everyday life?  What do I need to do to stay safe online?  Can I recognise something that may be harmful online?</p>	<p><b>Programming</b>  Can I make responsible choices about my online identity?  How do I insert variables in a programme?  Do I know that a variable has a name and a value?  How do I set variables and conditional statements in a programme?  Can I design a game using algorithms to achieve a desired outcome?  Did I make improvements to my programme?</p> 	<p><b>3D Modelling</b>  What is 3D modelling?  How can you modify 3D objects?  Could I combine objects in 3D modelling?  Can I create a 3D model for a given purpose?  How can I plan and create my own 3D model?</p> 
<p>Year 6</p>	<p><b>Spreadsheets</b>  What is a spreadsheet?  How can I format and edit different cells?  What is a formula?  How can I use a formula to add, subtract, multiply and divide data?  How can I use formulas and functions to solve challenging maths problems?  How can I use a spreadsheet to plan an event?</p>	<p><b>Search engines and communication</b>  How have computers evolved over time?  How do search engines work?  Is there a 'best' form of communication?  Can I create a website?  How can I enhance my website and make it more appealing?  Can I evaluate my website to make improvements in the future?</p>	<p><b>Programming (Python)</b>  What is Logo?  What are nested loops?  Is Python a programming language?  How are nested loops used in Python?  How are random numbers used in programming?</p> 