



Broad - Balanced-Enriching
Computing—Skills Progression



	Y1	Y2	Y3	Y4	Y5	Y6
Computer processing skills	<p>Children will learn how to:</p> <ul style="list-style-type: none"> Type with two hands Use the shift, space and enter key Edit work by using the backspace, delete and arrow keys Undo and redo text Select and format text Use a computer mouse How to switch on and shut down a computer Launch applications and manipulate windows Open and save files and folders Drag objects using a mouse 	<p>Children will learn how to:</p> <ul style="list-style-type: none"> Use the skills necessary to create a simple presentation Create folders and search for files Print work 	<p>Children will learn how to:</p> <ul style="list-style-type: none"> Build on prior word processing skills Use screenshots and the snipping tool Set a theme for a PowerPoint Use slide transitions and animations Create hyperlinks in the action settings Add audio and videos 			<p>Children will learn how to:</p> <ul style="list-style-type: none"> Understand and use spread sheets Format and enter specific formulas Solve specific problems such as number calculations Create their own spread sheet
Computer art	<p>Children will learn how to:</p> <ul style="list-style-type: none"> Use a simple painting program to paint Use different colours and brushes Create shapes Fill areas Undo and redo designs Add text to a paint design 	<p>Children will learn how to:</p> <ul style="list-style-type: none"> Build on their prior computing painting knowledge Create a painting in the style of an artist 	<p>Children will learn how to:</p> <ul style="list-style-type: none"> Draw, order, group and manipulate objects to make a picture 		<p>Children will learn how to:</p> <p>Develop and extend on their drawing skills to create 3D models</p> <p>Create simple and complex 3D models</p> <p>Add detail and manipulate 3D models using a variety of tools</p>	

Programming and animation

Children will learn how to:

- Understand the principles of programming through Bee-Bots and Scratch Jr
- Give simple algorithms
- Debug simple algorithms
- Use logical reasoning to predict how a program will behave
- Understand the basic principles of coding

Children will learn how to:

- Create, test and debug algorithms through Turtle Logo
- Give and follow simple instructions
- Create text and debug algorithms for shapes and routes
- Further develop algorithms using the 'repeat' command

Children will learn how to:

- Move and draw a figure on a screen using algorithms and the 'repeat' command

Children will learn how to:

- Write quizzes by combining questions
- Solve problems
- Test and debug algorithms
- Improve and evaluate their work
- Create an algorithm to program a procedure
- Use colour
- Set the position of the turtle (Turtle Logo) using coordinates
- Use the arc command to create patterns using different shapes

Children will learn how to:

- Use Scratch to build and edit algorithms
- Develop their skills in writing their own algorithms as well as editing and debugging existing codes
- Use flowcharts to program and control devices
- Build sequences of instructions, control multiple outputs and structure algorithms with decisions and inputs

Children will learn how to:

- Develop their skills in writing their own algorithms as well as editing and debugging existing codes
- Structure code and animate characters and scenes, gradually building to create a short animated story
- Program using Kodu

Using the internet

Children will learn how to:

- Use the internet safely and purposefully
- Search the internet using one word and make sense of the results
- Use "for kids" to return suitable results
- Follow links and then return to the search results
- Use a range of search engines
- Blog safely and responsibly

Children will learn how to:

- Distinguish between a reliable and unreliable website or webpage
- Save webpages in a browser, as well as in a file or folder, and how this can be shared with others
- Identify ways of communicating online, and how they can keep safe

Children will learn how to:

- Create and edit a webpage using Google
- Use advanced search features in Google
- Create a webpage with the layout of their own

Children will learn how to:

- Create an entire website by first researching what makes a good website
- Create a sitemap and multi-page website
- Link pages internally and externally
- Search for creative commons images and attribute them appropriately

Sound and recording

Children will learn how to:

- Use software and digital devices for recording sound
- Present, listen to and review their own sound recordings

Children will learn how to:

- Film and edit
- Use digital devices for recording (video camera or tablet) to plan good quality interviews for a documentary
- Use video editing software

E-safety

Children will understand:

- Rules to follow to keep safe online
- How to search for reliable sources online
- How to keep personal information private
- How to put their name and date on something that is theirs
- How to safely use email for communication

Children will understand:

- Websites that are appropriate and not
- Digital footprints
- Cyberbullying
- Keyword searching online
- How to judge whether a website is a good source of information or not

Children will understand:

- The importance of secure passwords
- How to communicate online safely
- How websites use promotions
- In-person and online communication differences
- How to communicate effectively via email

Children will understand:

- How to be a good online citizen
- How to protect themselves from online identify theft
- Cyberbullying messages
- How to increase the strategies for keyword searches
- Plagiarism

Children will understand:

- How to create strong passwords
- How to build a strong digital citizenship community
- Spam and its consequences
- How to cite a website
- Photo alternations and how can photos can be altered digitally

Children will understand:

- How to talk safely online
 - How to be a good digital citizen
 - Privacy rules and policies
 - How to tackle and deal with cyberbullying if it arises
 - How online stereotypes can be influential
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