Hunton C of E Primary School
Life in all its fullness - John 10:10

Progression of Skills in Computing

Computing			
Devas	**Bannerman**	**Porteous**	**Borton**
All about me! - 2 Paint a picture - Simple City - 2 Count Let's Celebrate - Paint projects - The Christmas Story Storyboard Polar Regions - 2 Create A story - Paint projects Growing - Plants labelling - Life cycle of a butterfly London - Beebots - 2Go - Fact files Beside the Seaside - Beebots - 2Go - 2 Count	**Cycle A** Online Safety Maze Explorers and Questioning Animated Story Books Making Music and Coding (Microbits) Spreadsheets and Pictograms Presenting Ideas (Power Point) **Cycle B** Online Safety and Effective Searching Lego Builders and Technology outside school Grouping and sorting and Creating pictures Spreadsheets Coding (Beebots) Coding (Microbits)	**Cycle A** Online Safety and Coding Coding (Microbits) and Spreadsheets (Excel) Writing for different audiences Logo and Animation Effective search and Presenting (Power Point) Hardware Investigators ad Making Music **Cycle B** Online Safety and Coding (Scratch) Coding (Microbits) and Spreadsheets (Excel) Touch Typing Email Branching databases Simulations and Graphing	**Cycle A** Online Safety and Blogging Coding (Scratch) Spreadsheets (Excel) Word Processing (Microsoft Word) Text Adventures and Networks Quizzing **Cycle B** Coding (Microbits) Online safety and Databases Spreadsheets (Excel) Game Creator 3D Modelling Concept Maps

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Computer Science						
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30-50 months I can make a control toy move. With support I can programme a control toy to move for a particular purpose. I can say what will happen when I press/swipe on a game using an IPad or whiteboard. **40-60+ months** I can use a range of control toys and devices. I understand that goals can be achieved by following a sequence of steps. I can follow symbol sequence algorithms. E.G. In PE jump, step, hop etc. I can programme a control toy one instruction at a time and clear it at the end. I can recognise that there is a problem and say what it is. I can predict what a programme will do next. **ELG** **PSED; Self-Regulation:** Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.	**Year 1** I can work out what is wrong with a simple algorithm when the steps are out of order. I can make logical attempts to fix my code if it isn't working properly. I can make good guesses of what is going to happen in a program.	**Year 2** I can design a simple program using 2Code that achieves a purpose. I can find and correct some errors in my program. I can say what will happen in a program. I can write a cause and effect sentence of what will happen in a program.	**Year 3** I can make a real-life situation into an algorithm for a program. I can design an algorithm carefully, thinking about what I want it to do and how I can turn it into code. I can identify an error in my program and fix it. I can experiment with timers to achieve repetition effects in my program. I can read programs with several steps and predict what it will do. I can design and code a program that follows a simple sequence. I can use email such as 2Email to respond to others appropriately and attach files.	**Year 4** I can design an algorithm that models a real-life situation. I can use repetition in my code. I can use: - Timers to create repetition effects - Selection - Variables and know how to change the value of variables - The user inputs and output features within my program I can use different methods to identify errors in my code. I can read programs that contain several steps and predict the outcomes. I understand that network and communication components can be found in many different devices which allow them to join the internet. I can recognise the main component parts of hardware which allow computers to join and form a network.	**Year 5** I can make more complex real-life problems into algorithms for a program. I can test and debug my programs as I work. I can use sequence, selection, repetition and some other coding structures in my code. I can organise my code carefully for example, naming variables and using tables. I know this will help me debug more efficiently. I can use logical methods to identify the case of any bug with support to identify the specific line of code. I know the importance of computer networks and how they help solves problems and enhances communication. I recognise the main dangers that can be made via computer networks.	**Year 6** I can turn a complex programming task into an algorithm. I can identify the important aspects of a programming task. I can test and debug my program as I work on it and use logical methods to identify a cause of a bug. I can identify a specific line of code that is causing a problem in my program and attempt a fix. I can translate algorithms that include sequence, selection and repetition into code. I can use inputs and outputs within my coded programs such as sound, movement and buttons. I can explain the different between the Internet and the World Wide Web. I can explain what a WAN and LAN is and describe the process of how access to the internet in school is possible.

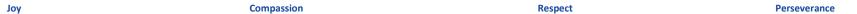# Progression of Skills in Computing

| Programme, sequence, design, instruction | Code, program, command, instructions, plan | Action, sequence, debug/debugging, execute, implement, coding | Run, sequence, repeat, command | Predict, select, sequence, implement, | Algorithm, decomposition, function, input, output, simulation, variable | Decomposition, function, simulation, variable, Launch Command, procedure, x and y properties. |

Information Technology

Devas	Bannerman		Porteous		Borton	
30-50 months I can use technology appropriately through role-play. I can recognise some technology that is used at home and school. I can name and use some technology with developing control. **40-60+ months** I can select and use technology for a particular purpose. I can name key features such as a keyboard and mouse and begin to use them with developing control. I can use a digital device to create and store content. E.G. taking a photo. **ELG** **Expressive Arts and Design; Creating with materials:** - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. - Share their creations, explaining the process they have used.	**Year 1** I can sort sound, pictures and text. I can add sound, pictures and text to a program. I can change content on a file such as text, sound and images. I can name my work. I can save my work. I can find my work.	**Year 2** I can organise data. I can find data using specific searches. I can use several programs to organise information. I can edit digital data. I can name, save and find my work. I can include photos, text and sound in my creations.	**Year 3** I can carry out searches to find digital content on a range of online systems. I can collect data and input it into software. I can analyse data using features within software. I can present data and information using different software. I can consider what the most appropriate software to use is when given a task by my teacher. I can create purposeful content and attach this to emails.	**Year 4** I understand the purpose of a search engine and the main features within it. I can look at information on a webpage and make predictions about the accuracy of information contained within it. I can create and improve my solutions to a problem based on feedback. I can review solutions that others have created, using a checklist of criteria. I can work collaboratively to create content and solutions. I can share digital content using a variety of applications.	**Year 5** I can search precisely when using a search engine. I can explain in detail how accurate, safe and reliable the content is on a webpage. I can make appropriate improvements to digital work I have created. I can comment on how successful a digital solution is that I have created. I can work collaboratively with others creating solutions to problems using appropriate software. I can use collaborative modes to work with others and share it.	**Year 6** I can use filters when searching for digital content. I can explain in detail how accurate and reliable a webpage and its content is. I can compare a range of digital content sources and rate them in terms of content quality and accuracy. I can consider the intended audience carefully when I design and make digital content. I can design and create my own online blogs. I can use criteria to evaluate the quality of my own and others digital solutions, suggesting refinements.
Move, collect, undo, organise,	Pictograms, data, record results, save, find, files	Dilute, symmetry, repeated pattern, domain, internet, search engine, data	Email, attachment, compose, Grid, cell	Balanced view, internet, reliability, results page, search engine	Design brief, net, evaluation	Archive, blog, collaborate, nodes, vlogs

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			address, data, graph, formula, range			

Digital Literacy

Devas	Bannerman		Porteous		Borton	
30-50 months I can recognise some technology that is used in the home and school. I can use technology appropriately through role-play. I can speak to an adult about what I have seen. I can say if something I find on the internet makes me feel scared. **40-60+ months** I can select and use technology for a particular purpose. I can access and use simple activities using technology with increasing control. I can name some uses of technology outside of school. I know that some information should be kept private. I know what to do if I see things that upset me online. **ELG**	**Year 1** I can say what technology is. I can say what examples of technology are in school. I can say what examples of technology are at home. I understand the technology in my environment is a mixture of old and new technology. I can keep my login information safe. I can save my work in a safe place.	**Year 2** I can find information I need using a search engine. I know the consequences of not searching online safety. I can share work and communicate electronically. I can report unkind behaviour and things that upset me online, to a trusted adult. I can see where technology is used at school. I understand that my creations, need similar skills to the adult world.	**Year 3** I can create a secure password. I can explain the importance of having a secure password and not sharing it with others. I can explain the negative consequences of not keeping passwords safe and secure. I understand the importance of keeping safe online and behaving respectfully. I can use communication tools respectfully. I can report unacceptable content and contact online in more than one way to a trusted adult.	**Year 4** I have a good understanding of the online safety rules we learn at school. I can demonstrate how to use different online technologies safely. I can demonstrate how to use a few different online services safely. I know I have a right to privacy both on and offline. I recognise that my wellbeing can be affected by how I use technology. I can report with ease any concerns with content and contact online and know immediate strategies to keep safe.	**Year 5** I have a secure knowledge of online safety rules taught at school. I can demonstrate the safe and respectful use of different online technologies and online services. I always relate appropriate online behaviour to my right to have personal privacy. I know how to not let my mental wellbeing or others be affected by use of online technologies and services. I can explain what personal information is and know strategies for keeping safe. I can use the most appropriate form of online communication.	**Year 6** I can demonstrate safe and respectful use of a range of different technologies and online services. I can identify more discrete inappropriate behaviours online. I can use critical thinking to help me stay safe online. I know the value of protecting my privacy and others online.

Progression of Skills in Computing

Understanding the world; Past and Present: Know some similarities and differences between things in the past and now, drawing on their experiences and what has been read in class. PSED; Self-Regulation: Show an understanding of their own feelings and those of others.						
Share, create, choose, select, use	Technology, search information, username, private	Online, searching, safe searching, shared electronically	Personal information, digital footprint, blocking, opinion	Password, digital footprint, wellbeing , opinion	Responsibility, screenshot, reliable source, password	Inappropriate, secure websites, password, location sharing