Barton Hill Academy

Computing Curriculum

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1	Mouse and Trackpad Skills • This includes clicking, navigating using the movement of the mouse and dragging and dropping. • The activities aim to support children in developing the hand-eye coordination skills and fine-motor required to operate a mouse effectively. • A typical laptop trackpad is also introduced.	Online safety: Logging in and passwords. Saving work and user spaces. Grouping and sorting: In real life then on cpus.	Coding : Children start to understand what an algorithm is (a set of instructions) Children understand what debugging is and can debug a simple program.	Coding : Recap/review on learnt knowledge. Children to learn how to set timers and use repeat function. Learn how to code, test and debug.	Coding : Recap/review on learnt knowledge. Children to learn how to use IF/ELSE functions. Implementing co-ordinates. Making a simple game.	Coding : Recap/review on learnt knowledge. Exploring computer science and vocabulary within it. Exploring decomposition and abstraction. Introducing strings (different variables)	Coding : Design and make a playable game. Inserting a timer and score function. Inserting text into the game.
Term 2	Keyboard Skills • This includes simple typing, capital letters and function keys such as 'enter'. • Activities are included that match lower-case and capital letters as most keyboards that children encounter will contain capital letters. • It also includes recognising different fonts for example, an 'a' written a or a. • Children can also combine mouse skills and typing skills using the mouse or arrow keys to control the cursor when writing.	Pictograms: Looking at how we can sort data using pictures. Basic instructions for programming: Looking at instructions and how to follow them on a cpu.	Online safety: How to search for information. What is email and how to use it. What is a digital footprint. Spreadsheets: Review/recap from Y1. Copying and pasting. How to represent/analyse data (simple bar charts)	Online safety: Setting a safe password. Fact or fiction on the internet. Appropriate content and ratings. Spreadsheets: How spreadsheets can automatically create graphs/charts. Using more than and Spin Button Tools.	Online safety: Keeping personal information safe. Malware. Plagiarism. Healthy screentime.	Online safety: Online behaviour. Protecting privacy. Reliable sources.	Online safety: Online behaviour and cyber bullying. In game messaging and dangers. Screen time and its impact on health.
Term 3	Drawing skills • This includes choosing pens and style and composing drawn images on screen. • It also includes the undo function. • The use of a tablet is suggested as well as a mouse to enable children to mark make using touch. Robots • Most early years classroom have access to floor robots; ideas are included for structured play with robots, starting with toy vehicles initially. • There are also ideas that start to develop children's logical processing skills in terms of following and creating instructions and making predictions.	Creating algorithms : Using directional keys to create movement. Debugging: How to amend an instruction to make it work properly. Animation: Knowing the difference between e-books and real books. Adding basic animations, sounds and effects.	Questioning: Using binary to create ayes or no questioning program. Effective searching: Gain a better understanding of searching the internet.	Keyboard and typing: How to use a keyboard and type efficiently. Email: How to respond to messages. Email safety. Attachments.	Spreadsheets: Looking at line graphs. How spreadsheets can be used for budgeting. Using spreadsheets for place value (maths link) Writing for audiences: (English link) Fonts. Newspaper articles.	Spreadsheets: Converting measures (maths link) How spreadsheets can be used for event planning. Using formula function. Databases: How to search them. Create a class database.	Spreadsheets: Exploring probability (maths link) How spreadsheets can be used for event planning and budgeting. Applying discounts. Blogging: What is blogging and why it is used. Planning and writing a blog. Sharing posts and commenting.
Term 4	Sounds • These ideas make use of recording tools	Coding: Children can plan and make a simple computer program.	Using cpus to create artwork: (Art focused unit) Looking at different artists (One	Branching databases: Creating a branch database for questioning with multiple	Logos: How and why logos ae used. How to use a simple logo program	Game creation: Planning a game. Creating an environment.	Text adventures: Creating a story based adventures that has different scenarios and