2025-2026 BEDs Computing Curriculum Overview Cycle A

	Term One	Term Two	Term Three	Term Four	Term Five	Term Six
FS *EYFS Understanding the World*	*Know and talk about the different factors that support their overall health and wellbeing: - sensible amounts of 'screen time'. *Be confident to try new activities and show independence, resilience and perseverance in the face of challenge. *Explain the reasons for rules, know right from wrong and try to behave accordingly. *Develop their small motor skills so that they can use a range of tools competently, safely and confidently. *Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.					
Y1/2	**Online safety: Year 1** * To know how to stay safe online. *Identify a trusted adult and how they can help. *Describe how other people may feel in different situations. *Understand what a digital footprint is and identify my own. *Name offline and online activities and how different activities make me feel.	**Computing systems and networks: Improving mouse skills** *My user name is: My password is: * Shapes and images can change size using 'click and drag'. * Shapes and images can be moved by using 'drag and drop'. * Fill tools and brush tools can be used to create backgrounds. *'Click and drag' can be used to create and layer shapes.	**Programming 1: Algorithms unplugged** *An algorithm is a set of instructions that can sometimes be carried out in any order. * An algorithm must be clear and precise. * Computers use inputs and outputs. * Decomposition allows you to solve a problem more easily. * Algorithms can have errors in them and we can fix them by debugging.	**Skills showcase: Rocket to the moon** * A list made on a computer can be saved and shared more easily. * A new document can be opened by clicking the 'plus' icon and selecting 'create'. * Instructions need to be in the right order. * Instructions can be followed to build something. *A spreadsheet is used to input data and graphs can be created from it.	**Programming 1: Algorithms and debugging** * A game can be decomposed to predict the algorithms that are used. * Computers can use algorithms to make predictions * A loop in programming will make an algorithm more efficient * Abstraction can be used to pick out important information. * Errors in an algorithm can be corrected by debugging.	**Computing systems and networks 2: Word processing** * To type a capital letter, hold the 'shift' key down. * Ctrl/cmd + B = bold. Ctrl/cmd + U = underline. Ctrl/cmd + 1 = italic. * An image can be selected and imported into a document. * Text can be copied and pasted using ctrl/cmd + A and then ctrl/cmd + C to copy. * Keyboard shortcuts can be used to change the text effect.
Y3/4 Birch	**Online safety: Year 3** *Not all information on the internet is true. *I need to ask permission before sharing content online. *Online activities can affect my emotions. *Devices can communicate with one another to share personal information. *Social media platforms are age-restricted.	**Computing systems and networks 1: Networks** *Components that make up a network are: Wireless access point/WAP, Network switch, Router, Server and devices * Files are saved on a server and files travel through wireless and wired connections. * The 3 main parts of how a website works are: the user, the server and the cloud. * A router connects lots of different devices together to create a network. * Data is broken down into packets and then transmitted over the internet.	**Programming: Scratch** * Scratch is a coding application. * A loop can be used to create repetition. * A remix is when you create a copy of the program and alter it in some way. * Blocks can be used to add conversation to sprites. * An algorithm can be used to code a program.	**Creating media: Video trailers- Using devices other than iPads** * The purpose of a book trailer is to entice the audience to buy and read the book. * Shots can be framed to create different effects. * Sound can be added to a video using the microphone button. * Text helps share important messages and transitions make the video flow smoothly from one scene to the next. * Successful videos use sound effects and transitions.	**Programming 1: Further coding with Scratch** *The main areas of Scratch are the code tab, the script area, stage and sprite library. * A game can be decomposed into parts to explore the code blocks that have been used to make things happen. * A variable is a container or holder for storing information that can change, e.g., numbers or text. * Variables can be words or numbers. * The 'if/else' block can be used to check whether an answer is correct.	**Computational Thinking** *Computational thinking is made up of decomposition, pattern recognition, abstraction and algorithm design. *Decomposition can be used to figure out what Scratch code does. *Abstraction and pattern recognition can be used to solve problems. *Algorithms can be used to write a script using Scratch. *Computational thinking can be applied to solve a problem.

	Online safety: Year 3	Computing systems and networks 1: Networks	Programming: Scratch	Creating media: Video trailers- Using devices other than iPads	Programming 1: Further coding with Scratch	Computational Thinking
Y4/5 Rowan	*Not all information on the internet is true. *I need to ask permission before sharing content online. *Online activities can affect my emotions. *Devices can communicate with one another to share personal information. *Social media platforms are age-restricted.	*Components that make up a network are: Wireless access point/WAP, Network switch, Router, Server and devices * Files are saved on a server and files travel through wireless and wired connections. * The 3 main parts of how a website works are: the user, the server and the cloud. * A router connects lots of different devices together to create a network. * Data is broken down into packets and then transmitted over the internet.	* Scratch is a coding application. * A loop can be used to create repetition. * A remix is when you create a copy of the program and alter it in some way. * Blocks can be used to add conversation to sprites. * An algorithm can be used to code a program.	* The purpose of a book trailer is to entice the audience to buy and read the book. * Shots can be framed to create different effects. * Sound can be added to a video using the microphone button. * Text helps share important messages and transitions make the video flow smoothly from one scene to the next. * Successful videos use sound effects and transitions.	*The main areas of Scratch are the code tab, the script area, stage and sprite library. * A game can be decomposed into parts to explore the code blocks that have been used to make things happen. * A variable is a container or holder for storing information that can change, e.g., numbers or text. * Variables can be words or numbers. * The 'if/else' block can be used to check whether an answer is correct.	*Computational thinking is made up of decomposition, pattern recognition, abstraction and algorithm design. *Decomposition can be used to figure out what Scratch code does. *Abstraction and pattern recognition can be used to solve problems. *Algorithms can be used to write a script using Scratch. *Computational thinking can be applied to solve a problem.

	Online safety; Year 5	Programming 2: micro:bit	Data handling: Mars Rover 1	Skills showcase: Mars Rover 2	Computing systems and networks: Exploring AI	Skills showcase: Inventing a product
Y5/6 Willow	*It's important to keep passwords safe. *There are positive and negative forms of online communication. *Online information about someone is often not always factually true. *There are differences between online and offline bullying. *Health and well-being can be affected in either a positive or negative way through online use.	* Tinkering lets me explore something new and independently. * The difference between 'on start' block and 'forever' block is: 'on start' block - the instructions start as soon as the code has loaded 'forever' block - a loop block and is one way of including repetition in programs. * Some code uses variables which are stored pieces of information which can change, altering the end result of a program. * Recognising code blocks and decomposing can help create a program for a specific task. * To create a program I need to decompose, write an algorithm and debug it.	* Mars Rover sends photos and data as binary code about Mars' surface back to Earth so Scientists can learn more about the planet. * Binary code is made up of 0s (off) and 1s (on). It is used in all data transfer between computers. *A rover receives data via the sensors and this data is sent through to the CPU. *When adding binary numbers, you line up the numbers as you would do in column addition or subtraction. Instead of carrying groups of ten, you carry groups of two. *Data transfer needs a common language and binary is the main means of all data transfer.	*Bit patterns represent images as pixels. *Data for digital images can be compressed. *Computers use fetch-decode-execute to process information. *Tinkercad – CAD stands for computer-aided design *Professionals use CAD to visualise their designs before building them. *Tinkercad can be used to design 3D objects	* AI is artificial intelligence and is used in everyday life. *AI is trained on data to recognise patterns and generate outputs. AI can be used to generate written content. *AI can be used to create visual content like pictures. * AI can help generate basic HTML code to create the structure and layout of a website. *There are ethical issues surrounding AI, including data privacy, bias and responsible use.	*Programs are designed for a specific purpose and adapting existing code can help to design a product. *Programs can become more efficient by using sequence, selection, repetition, variables, inputs and outputs. *CAD software can be used to design a product with inputs and outputs to make it work. * A successful product website should be: easy to navigate; clearly explains the purpose of the product; appropriate for the target audience; enough information about the product. *Identifying and articulating the key benefits of a product helps make an effective video advert.