Burlington Infant & Nursery School

Computing curriculum map

Our curriculum aims to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever-changing digital world. We focus on a progression of skills in digital literacy, computer science, information technology and online safety, to ensure that children become competent in safely using, as well as understanding, technology. Creativity is encouraged through cross curricular learning to engage and inspire children and as a result efforts are valued, individuality is celebrated, confidence and resilience is developed and all children flourish in computing.

	Autumn	Spring	Summer	Key Vocabulary
Nursery	**Explore** various technology eg remote control cars during continuous provision to begin to understand forwards and backwards **Use** technology in roleplay eg answering the phone	**Explore** different types of technology e.g. computer, camera, remote controlled games, microwave, programmable toys, torches **Explore** using Beebots and pushing/pulling different vehicles	**Name** a real life dangers e.g.traffic and road safety,dangerous litter, stranger danger, sun safety **Discuss** importance of keeping safe around the school e.g. different coloured lanyards, playground safety	push on off battery computer mouse keyboard forwards backwards
Reception	**Know** how technology in the helps us at home, in school and everyday uses **Explain** how technology can be used in different jobs **Name** something/someone that makes you feel safe/unsafe **Discuss** real life dangers e.g. traffic and road safety, dangerous litter, stranger danger, sun safety **Use** the IWB in the classroom e.g. 2simple	**Use** ipad to take a photo **Know** how to switch on the computer and **control** a mouse with increasing control **Create** pictures and writing using 2Simple. **Explore** changing font size and colour on 2Simple **Explore** using Beebot/Codapillar and know how to code. **Explain** why a simple BusyThings program (Beebot, Codapillar) has not worked e.g. moved too far, not far enough, wrong turn **Press** buttons and keyboard to make technology/games move e.g. Beebot, Codapillar, **Know** different ways of communicating e.g. letters, postcards, emails **Name** different types of technology e.g. ipads, computers,programmable toys, torches	**Complete** a simple program e.g. BusyThings, 2Simple paint **Turn** computers on and shut down after use **Recall** how to keep safe around the school e.g. different coloured lanyards, playground safety **Know** that the internet shouldn't be used without permission from an adult e.g. parents at home **Use** a keyboard to write name, using a capital with CAPS lock	keys instruction screen shut down Log on program sequence double click right click open icon pictogram turtle type space bar turn left/right cut paste paint brush enter CAPS lock
Year 1	**Turn** a computer on and off and log on using LGFL password	**Explain** what an algorithm is	**Open** up a web browser and **select** and use safe search filters	algorithm code

	Select a program **Select** and **change** the font, style, size, shape, colours and tools on Paint **Undo/redo** actions **Use** the text tool from the tool bar **Create** a file and **name** it, showing who it belongs to **Use** the shape tool to create a shape **Use** the backspace/delete **Use** the arrow keys to move around the text **Discuss** the links between the offline and online world	**Review** and spot mistakes **Create** step-by-step instructions using pictures **Programme** and direct a Beebot to a toy using the arrow buttons **Explain** how Beebot buttons change direction and distance, predicting behaviour of Beebot **Check** work for mistakes to debug a program and start again if needed **Evaluate** and improve a sequence JIT turtle - experiment to get turtle to destinations. Respond to comment to change instruction. **Investigate** how a product changes when the instruction is changed **Suggest** appropriate changes to work	**Type** words to find an image online **Save** images on a computer **Reflect** when something online might not be safe **Explain** that some personal information can affect my personal safety e.g.personal address **Suggest** ways to use emails safely and explain what to do if emails received are from unknown people **Use** shift and CAPS lock	username password debug search engine retrieve store save re-save animation clockwise/anticlockwise file folder animation load image video audio text toolbar copyright save folder font style undo/redo straight line primary colours portrait information safety personal
Year 2	**Recreate** Art in eg Jit, Paint, powerpoint by arranging different shapes **Change** the colour and size of dots/paintbrush **Insert** lines that are different sizes into work. **Fill** areas with different colours **Rotate**, **resize** and **colour** shapes **Produce** lighter and darker shades and make 2 versions of a piece of art using different shades **Retrieve** a picture file and open it in a computer programme **Duplicate** an image and alter the colours to create a piece of pop art **Decide** whether a website is useful or not	**Name** an example of an algorithm. **Explain** and model how algorithms need to be precise to be successfully converted into code **Design** simple programs using Turtle, Scratch and J2e JIT turtle - plan an algorithm for a route, test on computer, debug by reordering **Make** logical predictions on the behaviour of programs based on previous knowledge **Alter** work after discussion **Highlight** changes in sequences of instructions based on what has happened previously	**Know** what a digital footprint mean and how it contains information about a person **Identify** which keywords will give me good results and use a website to search for information **Decide** unkind online behaviour and know what to do if someone is being unkind online **Identify** which websites are suitable for the children's age **Use** both hands on the keyboard, use a word bank to create a piece of writing and use colour and formatting **Uplevel** a piece of work	frame duplicate retrieve email subject address communicate sender reliable Search filter alter trusted adult Digital footprint content social media post public appropriate cyber-bullying keywords

	Explain likes/dislikes about a website, use clues to decide who a website is aimed at			