Cathcart Street Primary School
Long Term Curriculum Map 2019-2020 : Computing

	Autumn		Spring		Summer	
Y1	**Modelling and Graphics:** Children use simple Art packages to create and change images. They explore simulations and investigate different effects.	**Word Processing:** Children will produce text on screen and change the font and size. They will save and retrieve their work.	**Programming:** Using directional language, children will control someone in class before transferring directions to a Bee Bot. Program the Bee Bot to follow simple routes, making a sequence of actions.	**Presentation:** Children will use 'sock puppets' to tell a simple story. They can use simple music programmes, such as 2Simple to create music for an intended event, such as Easter.	**Control:** Children will further explore directional language and commands through 'Daisy the Dinosaur' on the iPads. They will predict how Daisy will move and identify incorrect commands.	**Internet and Research:** Children will navigate pre-selected websites chosen to enhance their understanding of their Creative Curriculum topic. They will discuss and learn the SMART rules.
Y2	**Modelling and Graphics:** Children create and change images. They investigate different simulations and the effects that can be created within.	**Word Processing:** Create text and add images, changing the font, size and colours. They will save; print and retrieve work, adding sounds where they can.	**Programming:** Using directional language to control a Bee Bot. Enter sequences of instructions, with a specific purpose and direction, predicting its path.	**Presentation:** Children will create short, music phrases for an intended purpose, using one of the composition programs. Children will record sounds to accompany.	**Control:** Children will enter data in a computer simulation (A.L.E.X) predicting how the robot will move. Children will program routes, identifying incorrect commands.	**Internet and Research:** Children will type addresses into the address bar, and add to favourites. They will search for information for given questions, navigating pre-selected sites linked to CC. They will re-cap and learn the SMART rules.
Y3	**Modelling and Graphics:** Children will investigate the various tools and effects of an art package, designing a floor tile. Using a simple graphing programme, children will enter data and use it to create graphs.	**Word Processing:** Evaluate a range of electronic texts. Select and import graphics for a specific purpose. Use this to present information to a specific audience, making improvements by using the tools available.	**Programming:** Program instructions into a Roamer to follow a specific path. Test and amend instructions to produce shapes and letters, using the repeat key and changing variables.	**Presentation:** Children will create a collect sounds which can be uploaded to a music program. Children will organise sounds for an intended effect, saving and retrieving their work.	**Control:** Using SCRATCH, children will explore the basic command codes in order to create an animation with moving objects and images. This will be linked to their class topic.	**Internet and Research:** Children will evaluate web pages as to suitability. They will personalise their VLE page, contributing to online discussions and accessing work. Children will work within the internet safety rules and understand why they are in place and abide by them
Y4	**Modelling and Graphics:** Children will investigate photographs, using art tools to edit and create effects. Using a simple spreadsheet programme, children will enter, edit and present data.	**Word Processing:** Evaluate a range of electronic multimedia. Plan a piece of text for display – linked to writing and incorporating images. Children will use a range of tools including cut/paste, Word Art, shapes, insert and spell check.	**Programming:** Children can use Turtle (or turtleacademy.com) to explore Turtle, using directional commands to produce shapes and letters, using the repeat key. Use and change pre-written programs for an intended effect.	**Presentation** Children will listen to a variety of radio programs, creating a script before recording an audio. Children will add adverts, and interviews as well as sound affects they have created. Published on the website as a podcast.	**Control:** Using SCRATCH, children will explore the internet and various programs, to import and create images and sounds to make their own animations and profiles. They will organise commands to sequence events.	**Internet and Research:** Children will evaluate the reliability of information on the web, selecting relevant information to use in other software. Use information found to inform presentation work, without copying and pasting text. Talk about how to use the Internet safely
Y5	**Modelling and Graphics:** Children will stage and take photographs, using an art package to create specific effects. Using a spreadsheet programme, children will enter, edit and present data and use calculation tools.	**Word Processing:** Evaluate a range of electronic multimedia. Plan a piece of text for display, using cut and paste, delete/insert, spellcheck and other tools. Children can insert tables and investigate the effects created.	**Programming:** Investigate devices controlled by a computer. Use Turtle (or turtleacademy.com) to write and record a procedure to produce complex shapes e.g flowers, including degrees of turn. Predicts the effects of procedure change.	**Presentation:** Children will record sounds from a variety of sources, importing the sounds into editing software. Children will organise and layer sounds to create a radio play, which they will perform and record.	**Control:** Using SCRATCH, children will explore the PEN function in order to create specific shapes , calculating angles and using the repeat command. They will create games with live scores and using sensing effects.	**Internet and Research:** Identify irrelevant, biased, implausible and inappropriate information. Use the VLE to e-mail and blog safely, develop and understand rules for personal internet safety. Develop and understand code of conduct for online collaboration, and explain what to do in cases of cyberbullying
Y6	**Modelling and Graphics:** Children will stage and take photographs, using an art package to create intended effects including mirroring and stamping. Using a spreadsheet programme, children will enter, edit and present data, using tools to find data anomalies.	**Word Processing:** Evaluate a range of electronic multimedia. Plan a piece of text for display on the school website, Children use the full range of tools available to change and enhance their text, including adding hyperlinks.	**Programming:** Investigate devices controlled by a computer. Children will set up equipment so that sensors replace buttons pressed in program. Children will create and/or gates to ensure that responses happen regularly or at specific times.	**Presentation:** Children will plan, create and refine an audio book, creating and recording sounds from their environment to enhance the atmosphere. They will rehearse and refine their vocals, uploading the product to be shared on the school website.	**Control:** Using SCRATCH, children will create games using sensing affecting the changes within the game. They will use drawing tools to create an animation which they have planned and scripted first.	**Internet and Research:** Look at information from different viewpoints and validate. Use hyperlinks to trail an idea, skimming and selecting information, checking for bias. Use the VLE to discuss and e-mail safely, understanding the need for personal safety online, and for polite and kind behaviour. Develop and communicate rules and understand the results of breaking the rules.

E-Safety is embedded throughout each and every part of the Computing Curriculum.