

St Michael's Catholic Primary School



Computing Progression of Knowledge, Skills and Vocabulary

	Digital Literacy	Information Technology	Computer Science	Vocabulary
YF	<ul style="list-style-type: none"> Recognise purposes for using technology in school and at home. Understand that things they create belong to them and can be shared with others using technology. Recognise that they can use the Internet to play and learn. Develop an interest in ICT by using age appropriate websites or programs. 	<ul style="list-style-type: none"> Children are able to select and use technology for a particular purpose. Children can complete a simple program on a computer or tablet Be able to log onto a laptop (no password) Use paint programs to create pictures. Use a mouse to rearrange objects and pictures on a screen. Recognise text, images and sound when using ICT. Use a camera or sound recorder to collect photos or sound Begin to use a keyboard 	<ul style="list-style-type: none"> Help adults operate equipment around the school, independently operating simple equipment. Use simple software to make things happen. Press buttons on a Beebot and talk about the movements. Explore options and make choices with toys, software and websites such as sound, movements or new images – laptop, Bee Bot or Ipad 	Computer, Laptop, Keyboard, mouse, monitor, computer tower, text, image, sound, beebot, instruction
Y1 Builds on last years skills	<ul style="list-style-type: none"> Know that the internet is accessed all over the World and know some devices are connected to the internet. With support from an adult be able to find information on the internet. Identify examples of technology in the classroom Be able to name parts of the computer Explain how technology helps us Identify whether technology is an inputs or outputs 	<ul style="list-style-type: none"> Be able to log onto a computer with a password Be able to navigate around the screen with a mouse or touchpad Know how to type text using space bar for separate words to create something meaningful Know how to delete text Be able to independently find and use an app on a tablet for instance to take and view a video or photograph Be able to save work in their documents 	<ul style="list-style-type: none"> Know which button on a device represents which action (Bee Bot) Know how to program a robot to follow simple sequence of instructions (1- 2 turns) Make a simple sequence of algorithm Be able to make simple predications about an algorithm and a program. The Bee Bot will go.... Be able to change (debug) the program to improve the route 	Keyboard, Mouse, Internet, App, Screen, Computer, Save, Click, Website, algorithm, “delete key” “Shift Key”, Documents, coding, data, input, output, decomposition
Y2 Builds on last years skills	<ul style="list-style-type: none"> With support be able to use a safe search engine Be able to name parts of a computer and discuss purpose of each Identify whether technology is an inputs or outputs and explain why 	<ul style="list-style-type: none"> Be able to save, retrieve and print work on the laptop and iPad Know how to type and format text including basic punctuation and capital letters Be able to confidently use pointing device (mouse and touchpad) Be able to add and create simple images Be able to combine simple text and graphics, for instance create a poster for a purpose 	<ul style="list-style-type: none"> Know how to program a Lightbot to achieve set goal (sequence of 6-7 instructions: maze, point collecting) Begin to use block programming (Scratch Jr) to complete a simple program. Be able to debug more complex problems e.g. a route on maze. 	Sequence, Debug, Program, Open (<i>a document picture etc.</i>), Code, “Space Bar”, “Enter Key”, Online, Images, Edit, “Shift Key”, Print, Retrieve,
Y3 Builds on last years skills	<ul style="list-style-type: none"> Create and use a simple password Use a Search engine to find information given key words Know which websites are useful and begin to understand all might not be trustworthy. Be able to log in and out of websites used at school Understand how information is shared on the Internet Understand what a network is Name the key parts of a network Explain what a server does 	<ul style="list-style-type: none"> Be able to log in to computer system as themselves and can find their documents (personal drive) Know how to open shared documents and pictures. Know how to use software (Publisher) to create a simple brochure or poster. Know how to sequence and add to slides to make a simple presentation (Presentation). Create a meaningful document that contains both pictures and text. 	<ul style="list-style-type: none"> Be able to use a block program (Scratch & Logo Turtle) to make a simple programme using sequencing and timing. Inputs sets of instructions according to programming language and environment. Use repeat loops for instance to create a program to draw regular 2D shapes. Independently be able to debug basic mistakes Begin to use conditionals – If I click here then this happens... 	Loop, Repetition, Prediction, Search, Search Engine, Document, Folder, Software, File, Settings, Cursor, Pointer, Settings, Special Characters, Network, Device, Wireless,
Y4 Builds on last years skills	<ul style="list-style-type: none"> Reliably uses a more complex password to access resources. Know what the key words are to enter into a Search engine to find information they want. Can select useful websites from the results of a search. Understand that networks connect to the Internet via a router Understand how computer networks can provide multiple services, such as the World Wide Web 	<ul style="list-style-type: none"> Be able to save a document in a shared folder and retrieve this to continue working on it.. Be able to organise their personal folder effectively Know how to change font size and style; include shapes and backgrounds and to use the Spellcheck function Know how to collect and present data (Table on Word) To be able to use sequence to create an effective presentation or video Be able to deliver a simple presentation to their peers 	<ul style="list-style-type: none"> Be able to use a program to sequence, use conditionals and use a variety of inputs and outputs (Scratch & Logo Turtle) Debug programs that accomplish specific goals Be able to explain how their program works (use voice over) Be able to modify their program and be able to predict the effects of any changes Know how to break sets of instructions into short steps to achieve goal. (For instance drawing repeated squares to make a pattern) 	Conditional, Selection, Browser, Privacy, Online, Offline, Hacking, Input, Output, Images, Flowchart, WiFi, Router, USB Port

<p>Y5</p> <p>Builds on last years skills</p>	<ul style="list-style-type: none"> Effectively use a search engine to find multiple criteria using AND/OR to refine searches Know how to compare information from different websites and know that some sites may show bias 	<ul style="list-style-type: none"> To be able to share their work from their personal folder to work collaboratively with others. Be able to select the best program for the task. Using software to know how to add data into a prepared spreadsheet to answer simple questions. Independently, prepare an effective presentation to show their learning to others which includes some elements of timing or sequence. to create and sequence a video, add sound effects, transitions and title/subtitles. 	<ul style="list-style-type: none"> Use customisation to change a working program to change its effect. (For instance backgrounds and sprite in scratch) Uses loops to achieve goals (Scratch – shapes, letters) Uses variables, conditional sentences (when/then), external triggers and loops to achieve set goals (creating game in Scratch, an interactive slides in Powerpoint or Keynote for instance to create an interactive story, Creating a game in Kodu with a scoring system, Creating an electronic die with a Microbit) Solve problems by decomposing them into smaller parts Use logical reasoning to detect and correct errors in algorithms 	<p>Spreadsheet, Cell, Variable, Object, Transition, Trigger, “Fake News”, Presentation, VR (Virtual Reality), AR (Augmented Reality), URL (Uniform Resource Locator – <i>Website address...</i>), Micro:bit</p>
<p>Y6</p> <p>Builds on last years skills</p>	<ul style="list-style-type: none"> Know that search results can be manipulated by sponsorship and advertising. Know how to validate information found through searches by checking more than one source. Know that some news is ‘fake.’ 	<ul style="list-style-type: none"> Know how to use the main features of office software to produce suitable documents and presentations for an audience. Know how to edit a picture. Know how to create a simple formula in a spreadsheet to work out given mathematical tasks such as adding a set of numbers. To be able to use two or more programmes to create a final piece of work. (eg, edit a picture before inserting into a document). 	<ul style="list-style-type: none"> Use conditional sentences (when/then) to program objects (Kodu, Scratch, Microbit) As above but use mathematical expressions when constructing conditionals e.g. trigger winning when (If loops >5 then...) Be able to explain what a program will do and accurately predict the effect of changes. Be able to reliably modify existing algorithms and code to change the effect of the program. Be able to make an efficient program by using an effective algorithm and techniques such as loops and procedures 	<p>Equation, Manipulate, URL, Version, Hardware, “Print Screen”, “Escape Key”, “Special Character”, Phishing,</p>