Progression in Computing **St Teresa's Catholic Primary School**

	EYFS	KS1	LKS2	UKS2
Topics Taught	**Learning based on the children's interests to prepare them for the computing curriculum in KS1.** **Areas to prepare them for:** - **Computer Science** - **Digital Literacy** - **Information Technology**	• **Computer Science** • **Digital Literacy** • **Information Technology**	• **Computer Science** • **Digital Literacy** • **Information Technology**	• **Computer Science** • **Digital Literacy** • **Information Technology**
Computing				

Computer Science	Explore options in 2simple paint, making choices to achieve an outcome. Explore the BeeBot diggers and see how they move.	**Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.** Children can explain that an algorithm is a set of instructions to complete a task and show an awareness of the need to be precise. **Create and debug simple programs.** Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors. Children can confidently use Beebots and are beginning to access scratch. **Use logical reasoning to predict the behaviour of simple programs.** Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they understand what happens when you select	**Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.** **-** Children's algorithms are precise and link to real life situations. Children are becoming more natural when it comes to debugging their programs. **Use sequence, selection and repetition in programs; work with variables and various forms of input and output.** Pupils can use coding structures for selection and repetition**.** **Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.** Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. They can read code carefully to identify errors and make logical attempts to correct these. **Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.** Children recognise the main component parts of hardware which	**Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.** Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction). Some problems can be solved by breaking them down into smaller parts (decomposition). **Use sequence, selection and repetition in programs; work with variables and various forms of input and output.** Children translate more complex algorithms that include sequence, selection and repetition into code. Pupils show an improved understanding of variables in coding as well as inputs and outputs. **Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.** Children are able to interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole. **Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.**

		different buttons on the BeeBot.	allow computers to join and form a network.	Children understand and can explain the difference between the internet and the World Wide Web.
Information Technology	Use 2simple programs to create a printable documents/picture. Use camera/camcorders to record images/videos. Use computers to listen to and talk about sounds.	**Use technology purposefully to create, organise, store, manipulate and retrieve digital content.** Children are confident when creating, naming, saving and retrieving content. Children use a range of media in their digital content including photos and text.	**Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.** Children understand the function, features and layout of a search engine. They can appraise some webpages for credibility and information at a basic level. **Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.** Children use a range of software such as Microsoft word, publisher and PowerPoint to complete pieces of work. Children share digital content within their school community.	**Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.** Children can apply filters when searching for digital content. They are able to explain how credible a webpage is and the information it contains. **Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.** The children design and create their own pieces of work using a range of software. They are able to use criteria to evaluate the quality of digital solutions and are able to identify improvements, making some refinements.

Digital Literacy	Explore common uses of technology in the classroom.	**Recognise common uses of information technology beyond school.** Children can successfully retrieve relevant purposeful digital content using a search engine. Children can identify technology at home and in the local environment. **Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.** Children know the implications of inappropriate online searches. They know ways of reporting inappropriate behaviours and content to a trusted adult.	**Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.** Children can discuss key concepts relating to online safety. Children know different ways of reporting inappropriate content and contact.	**Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact.** Children demonstrate the safe and respectful use of a range of different technologies and online services. They understand the importance of preserving their privacy when online for their own and other people's safety and can help others to understand the importance of online safety.