COMPUTING

At St Teresa's Catholic Primary School our curriculum is driven by our mission to create confident and independent learners who have the skills and knowledge needed to be the best that they can be and who serve each other in a loving Catholic community.

Intent:

The study of computing allows the children at St Teresa's to develop a wide range of fundamental skills, knowledge and understanding that will equip them for the rest of their life. At St Teresa's, our intention is to prepare children for the ever changing world of technology by making technology accessible for all. Subsequently, empowering children to be safe and responsible learners of digital technology. Our computing curriculum is designed to enable children to use their creativity and thinking to further understand technology in a safe way. Technology is such a part of everyday life and exposing them to this throughout their time at St Teresa's provides them with the necessary skills to participate safely and effectively in the digital world.

The national curriculum for computing aims to ensure that all pupils:

can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation

can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems

can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems

are responsible, competent, confident and creative users of information and communication technology.

Computing at St Teresa's creates and fosters creativity, enthusiasm and inquisitiveness in all learners. Developing children's key computing vocabulary is paramount in our computing curriculum to ensure that the children at St Teresa's can clearly express themselves during lessons.

Implementation:

Implementing an engaging computing curriculum is vital to ensure children have the opportunities and experiences necessary to develop life-long skills. At St Teresa's, computing is taught progressively ensuring the knowledge and skills build year or year to deepen and challenge our learners. We have developed a 'Computing Progression Skills' and 'Long Term Plan' document which further exemplifies this progression.

At St Teresa's, computing is either taught explicitly during computing lessons or inexplicitly through other curriculum subjects. The 'Computer Science' part of the computing curriculum will often require a more explicit approach but can be embedded across other curriculum areas when appropriate. Whereas 'Digital Literacy' and 'Information Technology' are frequently taught by using technology to

demonstrate learning in other subjects. Teaching computing through a crosscurricular approach allows the children at St Teresa's to make connections between computing and other subjects. Using computers safely is paramount at St Teresa's and this in embedded at every possible opportunity. As well as this, computing focused days such as 'Internet Safety Day' also take place where the children participate in age appropriate activities to reinforce the importance of how to participate safely online.

Implementing computing is this way ensures a balanced coverage of computer science, information technology and digital literacy. Starting from the Early Years, the children will have experiences in each area but in increasing detail and depth to ensure the learning from the previous year is built upon. For example, in Key Stage 1 the children will be taught how to create digital content such as inserting text into Microsoft Word, which provides them with the necessary skills to progress in Key Stage 2, where they use a wider range of software to present information.

At St Teresa's, we understand that each class in unique and therefore a range of teaching strategies are used to cater for the vast needs of the pupils. Teachers have access to a wide range of resources as a starting point for the planning of computing lessons.

All children have the right to access the computing curriculum so computing lessons or discrete teaching of computing objectives are adapted to ensure they are accessible for all children. Computing can also be used to support SEND children on a one to one basis, when necessary.

A range of resources are available to support the teaching of computing including laptops, desktop computers and iPads which have a range of software and applications such as Microsoft Office and 2Simple. As well as interactive whiteboard, BeeBots and headphones.

Early Years Foundation Stage (EYFS):

Computing is introduced in the EYFS to prepare the children at St Teresa's for the computing curriculum in Key Stage 1. Opportunities are based on the children's current interests and are implemented discreetly into the play-based environment. For example, after showing an interest in animals the children may use simple applications such as '2Simple Paint' to draw the animal they're interested in.

Key Stage 1:

Throughout Key Stage 1, the pupils at St Teresa's will develop their computing skills. Pupils are taught basic skills such as typing, logging on and saving documents which provides them with skills needed to progress in KS2. The pupils will also start to make an informed choice about which technology to use for a specific task and understand why it is the most appropriate. As well as this, the pupils will know what to do and where to go for help if they feel unsafe or uncomfortable whilst using technology.

Key Stage 2:

Throughout Key Stage 2, pupils will build upon their previous knowledge to further develop their computing skills. They can use a range of technology to achieve a specific outcome and share their digital content with other children in the school. The pupils will understand the safe and respectful use of a range of different technologies and online services. They recognise the importance of their privacy when online for their own and other people's safety and can help others to understand the importance of online safety. In Key Stage 2, the children have the opportunity to a member of the 'Cyber Squad', which aims to support the children to develop and deliver their own sessions on internet safety to others at St Teresa's.

Impact:

The learning facilitates progression across all year groups which enables the children to confidently use technology in a safe and responsible way. The curriculum prepares pupils to live safely in a rapidly changing technological world and provides them with the tools required to keep them safe online. The pupils will have a secure knowledge of digital systems and can select the most appropriate to present their work. The children at St Teresa's can use their knowledge of computing to express themselves and develop their own ideas to be active participants in an everchanging digital world.

