What does Computing look like in our school?

What does it mean to be a Computer Scientist?

Computing is such an important life skill and technology is now part of everyday life and for most of us, is essential to our lives at home and at work. At St Marys, we learn vital Computing skills and knowledge as well as ensuring technology is embedded throughout the curriculum. We want to equip the future generations with the necessary skills for adult life and employment within the ever-changing technological environment we live in.

Our Curriculum and High Quality Resources	
EYFS	For our very youngest learners in the foundation stage we aim to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments feature computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through driving a remote-controlled toy and complete educational games on a tablet.
KS1 and 2	We follow the National Curriculum for Computing and to support our teaching we use Keystone Computing. Through this, the pupils learn about Computer Systems, Creating Media, Data and Information and Programming. We have access to chrome books and laptops once a week for our lessons. Evidence of these lessons and our learning appears in our Computing Big Books.

At St Mary's we:

At St Mary's we recognise that Computing is an integral part of our future and that we need to equip our children with the knowledge, skills and experiences in readiness for this ever changing world. By following the units in the Keystone Computer Programme we will provide them with the foundation that will give them the confidence to become strong computational thinkers. Through learning concepts such as Logic, Evaluation, Algorithms, Patterns, Decomposition and Abstraction, and approaches such as Tinkering, Creating, Debugging, Persevering and Collaboration, we enable our pupils to be able to develop resilience and problem solving skills which are life skills and transferable to other learning experiences.

There are 3 strands to Computing

Computer science This is the foundation or core knowledge base for the computing curriculum, it covers how things such as computers, the internet, programs and networking actually work.

Information Technology This is the practical application of skills. IT covers how we actually use the things that we have learned about in computer science.

Digital Literacy This is the understanding strand. It revolves around how we are able to use and express ourselves in a digital world, both in everyday life and the workplace. This may include how we behave online etc or how and why we use certain applications and their social context. *Online safety will generally fall into the digital literacy strand, but should be taught both through the practical use of technology in computing lessons and discretely within PSHE/RSE lessons.*

Feedback and Assessment

During class discussions, there are opportunities for children to receive precise and positive verbal feedback through: good questioning based on the Bloom's Taxonomy and furthermore we are able to deepen their understanding.

Assessment and Tracking Progress	
EYFS	Although formative assessment isn't required in EYFS, we do assess the characteristics of affective learning. These characteristics of learning encourage children to confidently apply their problem solving and computational skills.
KS1 and KS2	Teachers use daily formative assessment practices to identify misconceptions, key information that needs retrieving, and to review scaffolding techniques. This evidence is in the Big Books and informs next steps in teaching and learning to challenge or support all learners regardless of ability. As a summative assessment, children's progress against key objectives are reviewed termly.

Provision for those children who need additional support

The key skills and ideas are important for everyone. Support in lessons includes: Pre-teaching of vocabulary, visual aids and a clear presentation of steps to success, making links explicit, use of additional adults; scaffolds; over-learnt vocabulary.