St Botolph's Church of England Primary School
Computing Curriculum

Our aim is to provide our children with an engaging, exciting, and empowering curriculum that equips them for today and their future. At St Botolph's Church of England Primary School the curriculum is designed to: recognise children's prior learning, provide first hand learning experiences, allow the children to develop interpersonal skills, build resilience and become creative, critical thinkers.

Curriculum aims:

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 Intent:

At St Botolph's Primary School, we understand the importance of Computing being embraced and that pupils can access a high-quality computing curriculum which is rich, broad and balanced. We intend for our children to be equipped to use computational thinking and creativity to understand and change the world. We aim to model and educate our pupils to gain the life-skills to use new technology in a socially responsible and safe way to be successful.

At our school, we want our children to be competent and positive users of technology. We want to provide opportunities for children to build upon and practise these skills both in and out of school, equipping them for the rest of their education and future careers. We endeavour to show and guide children to use technology to support their learning, regardless of the subject.

Our Curriculum:

- The computing curriculum uses the NCCE 'Teach Computing 'curriculum and 'Project Evolve'.
- The computing curriculum is split into five areas of learning – computing systems and networks, creating media, programming, data and information and digital literacy.
- Digital literacy is taught as both stand-alone lessons (resources taken from Project Evolve) and is also entwined within the other areas of learning. The stand-alone lessons are taught at the beginning of each term and are revisited throughout the term.
- It is based on a spiral curriculum with themes being revisited regularly (at least once in each year group). Pupils revisit each theme with a new unit which consolidates and builds on prior learning.
- The units in each year group can be taught in any order apart from the programming, which builds on each other.

Yearly Overview - Computing

	Autumn		Spring		Summer	
Reception	**Computing systems and networks**	**Creating media**	**Programming A**	**Data and information**	**Creating media**	**Programming B**
Year 1	Technology around us	Digital painting	Moving a robot	Grouping data	Digital writing	Programming animations
Year 2	IT around us	Digital photography	Robot algorithms	Pictograms	Digital music	Programming quizzes
Year 3	Connecting computers	Stop-frame animation	Sequencing sounds	Branching databases	Desktop publishing	Events and actions in programs
Year 4	The Internet	Audio production	Repetition in shapes	Data logging	Photo editing	Repetition in games
Year 5	Systems and searching	Video production	Selection in physical computing	Flat-file databases	Introduction to vector graphics	Selection in quizzes
Year 6	Communication and collaboration	Web page creation	Variables in games	Introduction to Spreadsheets	3D Modelling	Sensing movement

Yearly Overview – Digital Literacy

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	**Self- image and identity**	**Online Relationships**	**Online Reputation**	**Online Bullying**	**Managing Online Information**	**Privacy and Security**
Year 2	**Online relationships**	**Online Reputation**	**Online Bullying**	**Managing Online Information**	**Privacy and Security**	**Copyright and ownership**
Year 3	**Self-image and Identity**	**Online Relationships**	**Online Reputation**	**Online Bullying**	**Health, Wellbeing and Lifestyle**	**Privacy and Security**
Year 4	**Self-image and Identity**	**Online Relationships**	**Online Reputation**	**Online Bullying**	**Health, Wellbeing and Lifestyle**	**Privacy and Security**
Year 5	**Self-image and Identity**	**Online Relationships**	**Online Reputation**	**Online Bullying + Managing Online Information**	**Health, Wellbeing and Lifestyle**	**Privacy and Security**
Year 6	**Self-image and Identity**	**Online Relationships**	**Online Reputation**	**Online Bullying**	**Health, Wellbeing and Lifestyle**	**Privacy and Security**