

# Computing at St Botolph's CofE Primary School The 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.

## Computing Policy 2022-23

#### An Introduction

Our Computing curriculum follows a government initiative scheme called The National Centre for Computing Education (NCCE). It has been designed by experts in the computing field and teachers to ensure that lessons have clear progression and provide children with a range of knowledge and skills. The units for Key Stage I and 2 are based on a spiral curriculum. Each of the themes is revisited regularly (at least once in each year group), and pupils revisit each theme through a new unit that consolidates and builds on prior learning within that theme.

#### Our Aims:

- To deliver a high quality, rich, broad and balanced curriculum
- To enhance pupils' enjoyment, resilience, understanding and attainment in computing

#### We aim for all children to:

- Understand and apply important principles of computer science
- Analyse and solve problems
- Evaluate and apply well known and new information technology
- Become safe users of technology, making calculated decisions to help protect themselves and others.
- Be creative and innovative users of technology.
- Be able to use, express and develop their ideas through information technology

As children move through the school, we hope for them to develop their computing independence - choosing software and programs suitable for other areas of the curriculum which would best support their learning.

## Implementation

Our computing curriculum is divided into four themes: computing systems and networks; creating media; programming; and data and information.

Creating media and programming is revisited twice each year.

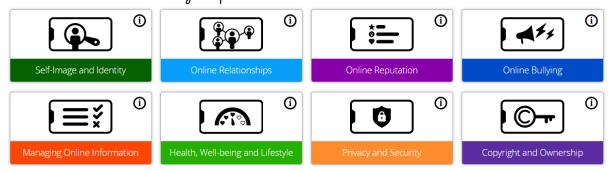
	Computing systems and networks'	Creating media	Programming A	Data and information	Creating media	Programming B
Year 1	Technology around us	Digital painting	Moving a robot	Grouping data	Digital writing	Programming animations
	(1.1)*	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)
Year 2	Information technology around us	Digital photography	Robot algorithms	Pictograms	Digital music	Programming quizzes
	(2.1)	(2.2)	(2.3)	(2.4)	(2.5)	(2.6)

	Computing systems and networks	Creating media	Programming A	Data and information	Creating media	Programming B
Year 3	Connecting computers (3.1)	Stop-frame animation (3.2)	Sequencing sounds (3.3)	Branching databases (3.4)	Desktop publishing (3.5)	Events and actions in programs (3.6)
Year 4	The internet (4.1)	Audio production (4.2)	Repetition in shapes (4.3)	Data logging (4.4)	Photo editing (4.5)	Repetition in games (4.6)
Year 5	Systems and searching (5.1)	Video production (5.2)	Selection in physical computing (5.3)	Flat-file databases (5.4)	Introduction to vector graphics (5.5)	Selection in quizzes (5.6)
Year 6	Communication and collaboration (6.1)	Webpage creation (6.2)	Variables in games (6.3)	Introduction to spreadsheets (6.4)	3D modelling (6.5)	Sensing movement (6.6)

Each unit has 6 lessons, which can be adapted by teachers to suit their class. The NCCE has been written to support all pupils. Each lesson is sequenced so that it builds on the learning from the previous lesson, and where appropriate, activities are scaffolded so that all pupils can succeed and thrive.

The NCCE links with the Education for a Connected World Framework, although not all aspects relating to online safety are covered within the NCCE curriculum.

At St. Botolph's we ensure all eight strands of the Education for a Connected World Framework is covered each year, either as part of the NCCE computing curriculum or as stand-alone digital literacy lessons. A long-term plan for each year group identifies which strand each year group should teach and when.



### **Impact**

The impact and measure of our curriculum is to ensure that pupils enjoy and value learning about and using technology. That children will achieve with regards to their knowledge and gain a sound set of skills which will equip them to use and apply their knowledge and keep them safe in everyday life. Pupils record and share their work digitally through Seesaw. We use this as one of the tools to review children's knowledge and skills.