



Martin Primary School

COMPUTING

Curriculum aim and intent

In our school we provide children with a high-quality computing education which equips children to use computational thinking and creativity to understand the world. Our curriculum teaches children key knowledge about how computers and computer systems work and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, whether or not they include computers.

During their time at Martin Primary the children's key knowledge and skills develop through a coherent, cohesive and consistent approach to ensure a clear progression, which is closely linked to other areas of the Martin Primary curriculum and our Rights Respecting ethos. The children are encouraged to use and explore a variety of technological devices and programs that become increasingly sophisticated as they move up through the school. In key stage 1 the children are introduced to a number of different programs such as, Bee Bots and Scratch Jr and this is then built upon in key stage 2 when children use Scratch, Movie Maker, J2e, Google media and a Crumble. In key stage 1 children use J2e and in key stage 2 Google drive is used to save and retrieve their work. The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

The four main areas of the computing curriculum that are taught are:

- Computer Systems and Networks
- Creating Media
- Programming
- Data and Information.

All children learn and remember a wide range of specific computing vocabulary, which they are able to apply accurately and effectively. To support them with this we use a vocabulary mat linked to each unit of work and games to promote retention of key vocabulary.

Through the study of computing, our children develop a wide range of fundamental skills, knowledge and understanding that will equip them for the rest of their lives.

Links to the EYFS - Understanding the World

It is important to us that all children have the opportunity to make sense of the world around them through first hand experiences to excite and engage them. Through hands-on activities in our forest and EYFS outside areas children begin to observe and create patterns in nature and design routes and mazes outside. This will link with their future learning in computing and enable them to start to understand computer concepts. These first-hand experiences help to enrich and widen the children's vocabulary, supporting communication and language of key computing vocabulary.

We provide a culturally, socially, technologically and ecologically diverse environment. This includes:

- continuous provision making use of technological toys or devices
- using a range of technological programmable toys such as Bee-Bots
- children learn about online e safety – the use of suitable websites, what to do if they see something online that they don't like and what information not to share.

Computing overview

Year 1	moving a robot digital painting	digital writing keeping myself safe	programming animations grouping data
Year 2	digital photography robot algorithms	pictograms making music keeping myself safe	programming quizzes
Year 3	desk top publishing	sequencing sounds branching databases events and actions in programs	stop-frame animation connecting computers
Year 4	audio-editing	the internet recognition in shapes	repetition in games photo editing using data-loggers
Year 5	vector drawings flat file databases	selection in physical computing - Crumble	video-editing selection in quizzes
Year 6	introduction to spreadsheets	internet communication web page creation	3D modelling