

COMPUTING CURRICULUM GUIDANCE

“Technology is the pen and paper of our time, and the lens through which we experience much of our world.”

David Warlick

Computing Intent

At St Andrew's Primary School our aim is to provide a high-quality computing curriculum which equips children with the life-skills to embrace and use new technology in a safe and responsible way. We want our pupils to be confident using a range of technology and to use computational thinking and creativity to understand and interact with the world. Computer science is at the core of computing, in which pupils are taught the principles of information and computation, how digital systems work and how to put these skills to use through programming.

We want our children to have the courage to be both creative programmers and critical users of technology; to create and program content imaginatively; and to use technology safely and responsibly.

By the time our children leave St Andrew's they will have increased their digital literacy in preparation for the future workplace in an ever-evolving digital world.

“We need technology in every classroom and in every student and teacher's hand, because it is the pen and paper of our time”.

David Warlick

Computing Implementation

At St Andrew’s Primary School, we follow the “Teach Computing” scheme of work from The National Centre for Computing Education. It is an inclusive and ambitious curriculum with lessons sequenced to build on previous learning. Our pupils will develop skills in computer systems, networks, programming, algorithms and creating media.

As programmers our children will understand how algorithms work and think logically about how to create and de-bug programs; they create, save, retrieve and send content using a variety of software. As digital users our children will evaluate digital content and use technology safely and respectfully. The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

Online safety forms a key part of our computing curriculum and this is taught within computing lessons.

Long term plan

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|--------|---|---|--|--|---|--|
| Autumn | Technology around us Digital painting | Information technology around us Digital photography | Connecting computers Stop-frame animation | The internet Audio editing | Sharing information Video editing | Internet communication Webpage creation |
| Spring | Moving a robot Groping data | Robot algorithms Pictograms | Sequencing sounds Branching databases | Repetition in shapes Data logging | Selection in physical computing Flat-file data bases | Variables in games Introduction to spreadsheets |
| Summer | Digital writing Programming animations | Making music Programming quizzes | Desktop publishing Events and actions in programs | Photo editing Repetition in games | Vector drawing Selection in quizzes | 3D modelling Sensing |

Computing Impact

Our children will have repeated practical experience of writing and de-bugging programs; they will be responsible, confident and creative users of information and communication technology and they will be creative problem-solvers. We will

continually analyse the impact of our computing curriculum by using pupil voice and regular assessment and monitoring.

Computing at St Andrew's

