

Computing at Churchstanton Primary School

“What a computer is to me is the most remarkable tool that we have ever come up with. It’s the equivalent of a bicycle for our minds.” – **Steve Jobs**



Statement of Intent

At Churchstanton Primary School, we encourage children to computational thinking and creativity to understand the impact and importance of technology in our modern world. Computing has huge potential across several aspects of the curriculum and can be used as a functional tool to support children to create, develop and produce their learning.

Our school aims to inspire children to understand what it means to be a computer scientist, by teaching the capabilities and benefits of computing networks and systems, while understanding the dangers and limitations that are also present through the use of technology. Our computing curriculum aims to ensure that children become digitally literate and are able to use technology to communicate ideas, develop knowledge and be creative in a safe, secure and considerate manner. We want our children to be able to obtain life-long skills and knowledge that will support them in an ever changing digital world, so that they are well equipped for the future.

Aims

The National Curriculum for Computing aims to ensure that all children:

- 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

Implementation

At Churchstanton Primary School, we use a two-year cycle (Cycle A and B) to ensure that all children have the expected coverage across each topic area, within the computing curriculum. The children's learning is often linked to the term's driver subjects across History or Geography, with some stand-alone topics to ensure that there is full coverage of the Key Stage 1 and 2 curriculums. The children use knowledge organisers to support their initial understanding around the topic and to introduce them to key vocabulary as well as other important information, which they can then refer to as they move forward in their learning.

Yearly Cycles A and B

| Churchstanton Primary School | Term 1 | | Term 2 | | Term 3 | |
|------------------------------|---------------------------------|----------------------|--------------------------------|----------------|----------------------|------------------------|
| Y1/2 Cycle A | IT Around Us | Technology Around Us | Digital Painting | Moving a Robot | Digital Writing | Programming Animations |
| Y1/2 Cycle B | IT Around Us | Technology Around Us | Pictograms | Digital Music | Robot Algorithms | Digital Photography |
| Y3/4 Cycle A | Desktop Publishing | | Events and Actions in Programs | | Stop Frame Animation | |
| Y3/4 Cycle B | The Internet | | Audio Production | | Repetition in Games | |
| Y5/6 Cycle A | Flat File Database | | Video Production | | Selection of Quizzes | |
| Y5/6 Cycle B | Communication and Collaboration | | Web Page Creation | | Variables in Games | |

Impact

Each year, the children will build on their existing understanding and utilise their previous skills and knowledge to support and engage with new learning. Children within the Computing curriculum become more independent through the use of technology and its functions, understand the fundamentals of how technology operates, recognise the history of current technology and its potential for the future as well as the real-world benefits, limitations and dangers that current and new technologies bring. Children have an improved understanding of the world around them and the systems that operate within it. The Computing curriculum aims to spark an interest in the children to pursue the topic further as they move through their different educational settings and throughout their lives.