

Computing Policy
The Crescent Primary School



Last Reviewed: 08/10/2026

Responsibility: Mrs Glover

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The Crescent Primary School Computing Policy

Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils will gain an understanding of computational systems of all kinds, whether or not they include computers. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.

The National Curriculum presents the subject as one lens through which pupils can understand the world. There is a focus on computational thinking and creativity, as well as opportunities for creative work in programming and digital media.

There are three aspects of the Computing curriculum: computer science (CS), information technology (IT) and digital literacy (DL). The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate- able to use, and express themselves and develop their ideas through, information and communication technology - at a level suitable for the future workplace and as active participants in a digital world.

Equality of Opportunity

At The Crescent Primary School we aim to give equal access and entitlement to the computing curriculum for all children. We teach computing to all children, whatever their ability. It is part of the school curriculum policy to provide a broad and balanced education to all. We provide learning opportunities that are matched to the needs of children. Pupils have the opportunity to work independently and as a team to build resilience and self-esteem through different tasks. In particular the idea of working in teams is vital in coding and debugging tasks. The Computing Curriculum provides access to opportunities and experiences that some children may not have the opportunity to have. Different technologies allow pupils to access learning opportunities, whatever their ability.

Here are some examples of the IT equipment we use:

- Laptops
- iPads
- Android tablets
- Laptops
- BeeBots
- Microbits
- Crumble Kits

Impact on Teaching and Learning

Computing is taught through the National Curriculum and supported by high-quality resources using the Digital Sparks Curriculum which provides a progressive framework for computing, digital literacy and online safety. Computing will be taught both as a discrete subject and through cross-curricular opportunities.

The Digital Sparks Curriculum is structured through the following strands:

- Digital Foundation
- Computing Systems and Networks
- Creative Media
- Digital Citizenship
- Data and Information
- Programming
- Physical Computing

The curriculum follows a spiral approach, allowing pupils to revisit and develop knowledge and skills throughout their primary education. Learning experiences are designed to create confident, creative and responsible users of technology while preparing children for an increasingly digital world.

Contributions of computing to teaching in other curriculum areas

Maths

Children use and apply mathematics in a variety of ways when solving problems using technology. Younger children use technology to communicate results with appropriate mathematical symbols. Older children use it to produce graphs and tables when explaining their results or when creating patterns, such as tessellations. They use simulations to identify patterns and relationships. When develop coding techniques using software such as scratch to write these and control programs.

Science

Use of apps on the iPad can support our science curriculum. Data loggers and digital cameras can be used to support teaching of primary science and coding programs such as Scratch. Algorithms can be used in science lessons and evaluating investigations can use the same skills as debugging computer programs.

Design and Technology

DT at the crescent will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. The use of IT is integral to this approach and several units for upper key stage 2 have been planned in order to use computing to meet DT objectives.

PSHE

Alongside our PSHE curriculum computing also has an impact as children learn to work together in a collaborative manner. They develop a sense of global citizenship by using the Internet and email. Through the discussion of moral issues related to electronic communication, children develop a view about the use and misuse, and they also gain a knowledge and understanding of the interdependence of people around the world. At the Crescent, we recognise the harm of internet misuse and in PSHE lessons teach children how to use the internet appropriately, responsibly and safely. The Computing and PSHE lead work closely together to ensure planning is kept up to date and relevant to today's changing world. Spiritual, moral, social and cultural development Computing teaches

children to develop a sense of awe and wonder regarding the new developments in technology. Computing also allows children to consider social issues such as cyber-bullying and staying safe online.

EYFS

- Recognise and use a range of familiar technologies.
- Use technology safely with adult guidance.
- Create simple digital content to communicate ideas and experiences.
- Follow simple algorithms and instructions through practical activities and programmable toys.
- Demonstrate curiosity about how technology works.
- Use technology purposefully to support learning, creativity and play.
- Show the foundations of positive digital citizenship and online safety awareness appropriate to their age.

Key Stage 1

By the end of Key Stage 1, pupils will:

- Use technology safely and respectfully.
- Create simple digital content independently.
- Understand and write simple algorithms.
- Program and debug simple sequences.
- Communicate ideas using a range of digital tools.
- Demonstrate the foundations of becoming safe, responsible and confident digital citizens.

Key Stage 2

By the end of Key Stage 2, pupils will:

- Design, write, test and debug programs that accomplish specific goals.
- Apply computational thinking to a range of real-world problems.
- Use technology creatively to communicate ideas and present information.

- Select and use appropriate digital tools for different purposes.
- Understand how networks and the internet support communication and collaboration.
- Evaluate digital information critically and responsibly.
- Demonstrate secure online safety knowledge and positive digital citizenship behaviours.
- Recognise the opportunities, responsibilities and risks associated with living in a digital world.
- Be prepared for the transition to Key Stage 3 computing and further digital learning.

Spiritual, Moral, Social and Cultural Development

Computing makes a significant contribution to pupils' spiritual, moral, social and cultural development by enabling them to understand and engage responsibly with an increasingly digital world.

Spiritual Development

Through Computing, pupils develop a sense of curiosity, awe and wonder about the rapidly changing world of technology and its impact on society. Children are encouraged to explore how technology has transformed communication, learning, creativity and everyday life. They are given opportunities to be imaginative, creative and reflective when designing digital content, programming solutions and solving problems. Pupils consider how technology may continue to shape the future and reflect on the responsible use of technological innovations.

Moral Development

Computing helps children develop a strong understanding of right and wrong in digital environments. Through online safety and digital citizenship education, pupils learn about ethical behaviour online, including respecting others, protecting personal information, recognising inappropriate content, understanding copyright and intellectual property, and using technology responsibly. Children learn to identify and respond appropriately to issues such as cyberbullying, online manipulation, misinformation and digital scams. They are encouraged to consider the consequences of their actions online and

understand that the same standards of behaviour expected offline apply in digital spaces.

Social Development

Computing provides many opportunities for collaboration, communication and teamwork. Pupils work together to solve problems, create digital projects, develop programming solutions and evaluate their work. Through discussion and shared learning experiences, children learn to respect different viewpoints, support one another and develop resilience when faced with challenges. Computing also helps pupils understand the importance of positive online relationships and effective digital communication. They learn how to participate safely and respectfully in online communities and recognise their responsibilities as digital citizens.

Cultural Development

Computing enables pupils to appreciate the role technology plays across different cultures and societies worldwide. Children explore how people use digital technology to communicate, learn, work and share ideas across the globe. They develop an understanding of how technological developments have influenced different communities and how technology can be used to celebrate diversity and promote inclusion. Through exposure to a wide range of digital creators, innovators and technological achievements from different backgrounds, pupils gain a broader understanding of the global digital landscape and the opportunities available to them in the future.

Online Safety and Digital Citizenship

Online safety is embedded throughout the Computing curriculum and reinforced across the wider curriculum. Pupils are taught how to stay safe, respectful and responsible when using technology. They learn how to manage risks, protect their wellbeing online, seek support when needed and make informed decisions when engaging with digital content and communication. Through the Digital Sparks Curriculum, children develop the knowledge, skills and attitudes needed to become safe, confident and responsible users of technology in modern society.

Monitoring and Evaluation

The monitoring of Computing takes place on a regular basis, through a variety of ways including classroom observations, work sampling and pupil conferencing. This policy will be reviewed and evaluated regularly.

Resources

The Computing subject leader and the Headteacher will continually monitor the resources required to deliver the computing element of the new National Curriculum. Support will be made available for staff subject knowledge and the use of resources if required.

Subject Leaders Responsibility

Update equipment and be responsible for implementation in class, be aware of new technology and its potential use within class, oversee planning for Computing and be prepared to advise on new technology and implement and maintain a quality training programme, plan and implement lessons using a varied set of resources, ensuring the objectives of the curriculum are covered.

Health and Safety

There is a need for all staff to be aware of the specific health and safety guidelines pertaining to Information Communication Technology, linked to the school's risk assessments.