

Computing Policy

2022/2023

AIMS AND OBJECTIVES

Aims and Objectives The National Curriculum 2014 states that computing is a key skill for everyday life. Computers and tablets are a couple of the tools that can be used to communicate and present information. Through teaching computing, we equip children to participate in a world of rapidly changing technology. We enable them to find, explore, analyse and present information. We also help them develop the necessary skills for using information in a discriminating and effective way. This is a major part of enabling children to be confident, creative and independent learners.

The curriculum aims to ensure that all pupils:

- Can understand and apply the key principles of computer science, including algorithms, logic, data representation and communication.
- Can analyse problems in computational terms and have experience of writing computer programs.
- 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.

The objectives of teaching computing are to enable children:

- To develop capability in finding, selecting and using information.
- To use computing for effective and appropriate communication.
- To monitor and control events, both real and imaginary.
- To apply their computing skills and knowledge to their learning in other areas.
- To explore their attitudes towards computing and its value to them and society in general. For example, to learn about issues of security and personal safety, confidentiality and accuracy (see esafety policy).
- Develop their understanding of how digital systems work, and to become digitally literate individuals.

Purpose of Study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. 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.

What do we want Computing to be like at Abbey?

At Abbey, we want Computing to be:

- Challenging and inspiring.
- Fun and engaging.
- Include a range of different technologies. Learning will be completed through different media, such as, iPads and chrome books.

We want children:

- To be able to describe and explain, with confidence, how they can keep themselves safe whilst online.
- To understand that the basis of computing is computer science and that it underpins how computers work.
- To be able to describe different programs they could use to achieve a given goal.
- To be confident to ask questions.
- To understand how they can make a positive impact on our community and the wider world through the use of technology.

Coverage

At Abbey Mead, we follow the Purple Mash schemes of work. These fully cover the National Curriculum objectives and allows for clear progression. Modules are designed to enable pupils to achieve the stated objectives. The schemes show how skills are distributed across the year groups, and how these fit together to ensure progression of skills within the curriculum map. Computing is taught discreetly weekly in KS1 and KS2 but the skills that the children learn are used across the wider curriculum.

The computing units are designed to build on prior learning. While we offer opportunities for children of all abilities to develop their skills and knowledge in each unit, we also plan progression into planning so that children are increasingly challenged as they move up through the school.

EYFS

Whilst Computing is no longer mentioned in the EYFS framework it obviously continues to play an important part. A lot of the KS1 computing curriculum is based on identifying technology in and outside of school and how to interact with it and these skills start at EYFS. Pupils learn to interact with technology in EYFS and then consolidate and build on that learning in KS1. The most relevant statements for computing are in 4/7 EYFS areas of learning:

• Personal, Social and Emotional Development (Remember Rules ((E-Safety)); know and talk about the different factors that support their overall health and wellbeing – screen time).



- Physical Development (Develop small motor skills to use a range of tools competently; safely and confidently, match developing physical skills to tasks and activities in their setting)
- Understanding the World (explore how things work)
- Expressive Arts and Design (Explore, use and refine a variety of artistic effects to express their ideas and feelings; safely use and explore a variety of materials, tools and techniques, experimenting with colour, design texture, form and function).