

# Computing Subject Narrative

## Computing overview

In each Key Stage, each autumn term begins with an online safety unit. The teaching of this unit in every Year Group enables children to be introduced to key principles for online safety to help them to build the skills they need to keep themselves safe when using computers and accessing the internet. Years 2, 4 and 6 also learn how to use spreadsheets in autumn 1.

#### Key Stage 1

Year 1 and Year 2 explore coding in autumn 2 to allow them to become familiar with the key components of writing code. As autumn is a longer term, this also allows more time for consolidation of the learning to ensure that children have a good foundation in coding skills and knowledge in preparation for Key Stage 2.

In many units, children will be furthering their online understanding and concepts of technology (Digital Literacy) through making digital content (Information Technology and Computer Science.)

Children explore different ways of presenting information, for example Year 1 explore combining words, pictures and sounds to create simple e-books and Year 2 explore creating simple digital concept maps, quizzes and fact files.

The topic 'Effective Searching' in Year 2 introduces the children to the internet, the features of search engines and how these can be used to (safely) find information effectively.

#### Lower Key Stage 2

In Lower Key Stage 2, Year 3 cover coding in autumn 2 to build upon their previous understanding of coding covered in Key Stage 1. They also learn how to send e-mails appropriately and explore simulations. The children also develop their knowledge and skills in presenting information when they explore the use of PowerPoint.

Year 4 further develop their presentational skills when they learn about how to write for different audiences. They investigate how to use animation using the program 2Animate.

The unit 'Artificial Intelligence' allows the children to examine how AI can be useful in society and to think about its future applications. The children also build upon their prior knowledge of using search engines in the unit 'Effective Searching,' where they learn to structure their queries to locate specific information more efficiently.

### Upper Key Stage 2

In Upper Key Stage 2, Year 5 explore more complex concept maps in order to build on their prior knowledge of these. The children also examine how to explore and plan for real-life situations using spreadsheets, databases, 3D modelling and external devices such as Microbits.

In Year 6, the unit 'Networks' allows the children to deepen their understanding of the features of the internet and the world wide web and understand how our school network operates.

Throughout the computing scheme, there is complete coverage of all national curriculum programmes of study.