Computing Curriculum

OFFORD
PRIMARY SCHOOL

Computing Overview

	Year A	Year B
Year 1/2	Technology around us and IT around us Digital Writing	Technology around us and IT around us Making Music
	Programming – Moving a robot Digital Painting	Programming – Robot algorithms Digital Photography
	Grouping Data Pictograms	Programming animations Programming – An Introduction to quizzes
Year 3/4	Connecting Computers Stop-frame Animation	The Internet Photo Editing
	Programming – Sequence in Music Desktop Publishing	Programming – Events and actions Audio Editing
	Branching Databases Programming – repetition in shapes	Data Logging Programming - Repetition in Games
Year 5/6	Systems and searching Vector Drawing	Communication and Collaboration Video Editing
	Programming – Selection in Physical Computing Flat File Databases	Programming – Selection in Quizzes Webpage Creation
	3D Modelling Programming – Variables in Games	Introduction to Spreadsheets Programming - Sensing

Computing Vision Statement

Computing is changing the lives of everyone. Through teaching, we equip children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. Computing aims to enable pupils to use computational thinking and creativity not only in the area of computer science, but also in cross-curricular way, linking to area of Mathematics, Science, English and many others. At the core of the study of computing, however, is computer science, in which pupils learn to study and manipulate information and computation, researching how digital systems are effectively structured and creating and debugging programs in a range of contexts. Alongside this, pupils will be supported in becoming safe and digitally literate individuals who can develop their ideas through the medium of ICT. The curriculum is designed around three main areas: Understanding Technology (Computing systems and networks), Programming, and Digital Literacy (including creating media, and Data and Information). The curriculum is supported by planning and resources written by the Teach Computing scheme of work which was created by specialists at the National Centre for Computing Excellence (partially funded by the DfE). The Online Safety will be delivered both through different units of the computing curriculum where appropriately linked, or by stand alone lessons. Project Evolve is linked to and covers the objectives from Education for a Connected World document.

Aims and Objectives

- To support children to understand and apply the fundamental principles and concepts of understanding technology, programming and digital literacy.
- To teach the children to analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems.
- To inspire children to evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- To ensure that children are responsible, competent, confident and creative users of information and communication technology.

We will do this by:

- Developing children's individual Computing capability.
- Developing skills and understanding as well as knowledge.
- Developing the use of technical language.
- Enhancing learning in other areas of the curriculum using Computing.
- Developing Computing as a tool for learning and investigation in all subjects
- Equipping pupils with the confidence and capability to use Computing throughout their later life.
- Recognising the potential and deepen the awareness of the application and necessity of Computing in everyday life.
- Stimulating interest in new technologies.
- Exploring their attitudes towards Computing and its value to them and society in general. For example, to learn about issues of security, confidentiality and accuracy.

- Using Computing for effective and appropriate communication.
- Using their Computing skills to develop their language and communication skill