



Intent – What we are trying to achieve?

At Nunnery Wood Primary School our aim is to ensure our pupils are happy and enthusiastic learners who eagerly develop knowledge and skills that prepare them to become a thriving member in our ever-changing world. As we recognise children are living in a highly developed technological world, our Computing opportunities will enable pupils to succeed in a constantly changing society. We aim to provide classroom environments, resources, activities, and opportunities that stimulate and support children in developing their full potential in Computing. Computing activities will enable and encourage the children to use their creativity, imagination, problem solving and social interaction skills in order to develop ideas, programme, present and become responsible digital citizens. Open-ended opportunities provide children with opportunity to apply their skills and knowledge to a greater depth (mastery) level.

Through the teaching of Computing we aim 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.

(The national curriculum aims)

What does Computing look like at NWPS?

Computing lessons follow the three main strands of learning, these are:

Computer Science – the understanding of how digital systems work and how to use this knowledge to write computer programs. Children will learn key concepts such as: decomposition, abstraction, debugging, algorithms, sequencing and variables. This will enable them to develop logical reasoning and problem solving skills, which can be used across a wide range of subjects. The children are also taught about computer networks, parts of a computer and how packets of data are sent via the internet.

Digital Literacy – The E-safety elements of the curriculum. The children are taught about how to stay safe online: cyber-bullying, social-media etiquette, safe passwords, privacy settings and issues related to copyright and plagiarism, to name a few.

Information Technology – the skills required to produce work using computers, such as creating presentations, publishing work, taking photos and videos, and creating digital artwork.

Another important area, which is taught throughout is:

Computational Thinking – about being logical thinkers, breaking down problems and solving them, both with or without a computer.

Computing is taught using a variety of methods, for example: class room based discussion, laptops, ipads, using the internet, and programming external hardware.

Teaching of Computing will include a wide range of new skills specific to Computing (e.g. using the internet safely, programming using Scratch) however; the skills and knowledge from many other subjects including art, science, maths and computing will be drawn upon and applied.

What Computing is taught at NWPS?

The scheme of learning used at NWPS follows the National Curriculum; it ensures appropriate progression of skills and aims to secure long-term memory as well as the enjoyment of learning in Computing.

Early Years and Key Stage one - The youngest children in Early Years are encouraged to show an interest in technology and are given continuous opportunity to explore different forms of technology. Year 1 and 2 begin to put this exploration into action, by using programs, using technology safely and programming simple devices.

Key Stage two – Throughout Key Stage Two children are taught to programme more detailed programmes, by starting with simple algorithms and developing their skills to more specific programming, fixing bugs along the way. The children will also become familiar with computer networking and how the internet connects and communicates. All of this is taught alongside constantly developing digital literacy skills to keep the children safe in the ever changing context of their use of technology.