

The 2014 national curriculum introduces a new subject, Computing, which replaces ICT. This represents continuity and change, challenge and opportunity.

Computing is concerned with how computers and computer systems work, and how they are designed and programmed. Pupils studying computing will gain an understanding of computational systems of all kinds. Computational thinking provides insights into many areas of the curriculum, and influences work at the cutting edge of a wide range of disciplines.

At Meadow Park Academy we believe;

- Children should be equipped to use technology as a tool to enhance and improve work quality, efficiency and lifestyle.
- Children should understand how to use all technology safely and responsibly, especially online communication technologies. (also see e-safety policy)
- Children should have an understanding of how computers and networks function, and how they can be programmed.

## The nature of Computing

The new National Curriculum presents the subject as a whole 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. The introduction makes clear the 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 children 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 communication technology – at a level suitable for the future workplace and as active participants in a digital world.

## Entitlement

In the Foundation Stage, the Information Communication Technology requirement stated in the Knowledge and Understanding of the World element of the Early Learning Goals Foundation Curriculum are covered in continuous and blocked units.

	<b>Computational thinking and programming</b>	<b>Digital Literacy</b>	<b>Information Technology</b>
<b>Key Stage 1</b>	<ul style="list-style-type: none"> <li>understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions</li> <li>create and debug simple programs</li> <li>use logical reasoning to predict the behaviour of simple programs</li> </ul>	<ul style="list-style-type: none"> <li>recognise common uses of information technology beyond school</li> <li>use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies</li> </ul>	<ul style="list-style-type: none"> <li>use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> </ul>
<b>Key Stage 2</b>	<ul style="list-style-type: none"> <li>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> </ul>	<ul style="list-style-type: none"> <li>understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration</li> <li>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ul>	<ul style="list-style-type: none"> <li>select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information</li> </ul>

## Implementation

At Meadow Park Academy Computing will be taught as both a discrete subject and in a cross curricular way when the opportunity presents itself.

The school has a bank of PCs which can be distributed around the school and will be used to help pupils access the Computing curriculum, along with a range of other resources including tablets, interactive whiteboards and programmable toys. The Computing subject leader and the Head teacher will monitor the resources required to deliver the Computing element of the new national curriculum.

## Health and Safety

To avoid continuous focus on the screen, teachers should model at regular intervals. Staff and pupils should avoid standing directly in front of the white board projector. The projector beam should not be looked at directly.

## Assessment

Assessment of children's work in Computing is ongoing. Achievement is reported to parents at the end of each academic year. Children's work is saved to the server for reference throughout the year.

## Review

The Head teacher and staff will review the policy in accordance with the development priorities stated in the School Improvement Plan. Any suggested amendment will be presented to the governing body for discussion.