

Regents Park Community Primary School

Computing Subject Overview



DfE Statement:

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.

Intent: What we want to achieve

At Regents Park Primary School, we understand that the skills developed through a high-quality computing curriculum are essential for children to become competent, responsible, confident and creative participants in an increasingly digital world. Our computing curriculum is developed in line with the National Curriculum programme of study for computing (2014) and aims to ensure that all pupils are taught computing skills within these three strands:

Computer Science: Pupils are taught how computers and computer systems work and how they are designed and programmed. They can analyse problems in computational terms and have repeated practical experience of programming and debugging to solve such problems.

Information technology: Pupils learn to use computer systems purposefully to create, organise, store, manipulate and retrieve digital content.

Digital Literacy: Pupils recognise common uses of information technology beyond school and learn to use computer technology effectively, safely and respectfully. This includes use of computer applications, the development of basic skills and responsible use of the internet.

It is our aim that the computing curriculum is relevant, challenging and enjoyable for every child. Pupils should be able to apply the skills that they learn by using technology throughout the curriculum and for home learning. Pupils should also develop problem solving, communication and collaboration skills which they can use within other lessons and outside of school. We are aware that not every child has the same access to technology outside of school and are committed to giving pupil access to a variety of devices and resources in school.

Implementation: How will we do this

The content and principles underpinning our computing curriculum are taken from the 2014 National Curriculum programme of study. We use the National Curriculum to guide us on the content and focus of each lesson.

Our computing curriculum has been mapped out to ensure that there is effective coverage and progression of skills across every year group.

Although computing is not a statutory part of the EYFS, in line with the Statutory Framework for Early Years, we ensure that children in the foundation stage receive a broad, play-based experience of computing through the use of new technologies.

We ensure:

- Pupils build confidence to use technology purposefully to support their learning for all Early Learning Goals as appropriate.
- Pupils in Foundation Stage will have experiences using technology indoors, outdoors and through role play in both child-initiated and teacher-directed time.

Computing planning in Key Stages 1 & 2 has been mapped out to ensure that pupils are taught the skills and objectives from the National curriculum programme of study <https://www.gov.uk/government/publications/national-curriculum-in-england-computing-programmes-of-study/national-curriculum-in-england-computing-programmes-of-study>

Planning has been developed and adapted by the Computing Lead using the Entrust Scheme from Reception through to Year 6 that is progressive, ambitious and coherent. Switched This provides careful content about what pupils need to be taught and to remember in computing at various stages of primary education. allows for clear progression in computing.

Each year group has six computing topics which cover the strands of computer science, information technology and digital literacy. These topics are designed to build and consolidate on previous learning as well as introducing new concepts and skills. Within each topic pupils are also introduced to a range of different technologies and programs that they can use to enhance and develop their computing skills. ProjectEvolve is used across the year for each year group in order to support pupils' online development.

Teachers adapt each module to the needs and abilities of their class and plan opportunities for formative and summative assessment in order to ensure the progress of each pupil. They take into account the requirements of every pupil and plan, where necessary, to support children who have particular barriers and therefore enable them to participate effectively in the curriculum and assessment activities. This is in accordance with the school inclusion policy.

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Impact: What the outcomes will be

Children should be digitally literate: able to use, express themselves and their ideas digitally across the curriculum. They will be competent and safe users of information technology with an understanding of how technology works and its purpose in the world. Pupils will have developed logical thinking and problem solving skills and used them effectively to program and debug across different programming platforms. Through discussion and feedback, children across the school should be able to show an understanding of online safety, be able to talk about the potential risks and how they can keep themselves safe online. The way pupils showcase, share, celebrate and publish their work shows the impact of our computing curriculum. Evidence of pupil understanding, and skills acquisition is also shown digitally through their work on BGFL365. Every unit of work has an end of unit assessment which reviews skills and vocabulary learnt during the module.