Penketh South CP School

Computing Policy

Version	Date	Action
V1	**September 2025**	**New Policy**

Computing Policy

The use of computing is an integral part of the National Curriculum and is a key skill for everyday life. Computers, iPads, programmable robots, digital and video cameras are but a few of the tools that can be used to acquire, organise, store, manipulate, interpret, communicate and present information.

At Penketh South, we recognise that pupils are entitled to quality hardware and software and a structured and progressive approach to the learning of the skills needed to enable them to become Computing proficient.

Aims:

• Provide a relevant, challenging and enjoyable computing curriculum for all pupils.

• Meet the requirements of the National Curriculum programmes of study for computing.

• Use computing as a tool to enhance learning throughout the curriculum.

• To respond to new developments in technology.

• To equip pupils with the confidence and capability to use computing throughout their later life.

• To enhance learning in other areas of the curriculum using computational skills.

• To develop an understanding of how to use Computing safely and responsibly. The National Curriculum for Computing aims to ensure that all pupils:

• Can understand and apply the fundamental principles of computer science, including logic, algorithms, data representation, and communication.

• 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 digital devices and the Internet.

Rationale

The school believes that Computing:

• Gives pupils immediate access to a rich source of materials.

• Can present information in new ways which help pupils understand access and use it more readily. • Can motivate and enthuse pupils.

• Can help pupils focus and concentrate.

• Offers potential for effective group working.

• Has the flexibility to meet the individual needs and abilities of each pupil.

Early years

It is important in the Foundation Stage to give children a broad, play-based experience of computing in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature Computing scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources such as metal

detectors, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particular useful with children who have English as an additional language.

Key stage 1 Pupils

• Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.

• Create and debug simple programs.

• Use logical reasoning to predict the behaviour of simple programs.

• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

• Recognise common uses of information technology beyond school.

• 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.

Key stage 2 Pupils

• Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

• Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.

• Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

• 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. • Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

• 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.

• Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Programme of study

We are currently using the Teach Computing and Project Evolve schemes of work to support our teaching of the Computing curriculum including online safety curriculum; this teaches the children to use a wide range of current software and apps. We also endeavour to further hone computing skills by incorporating the use of technology across the whole curriculum.