

Royal Borough of Kingston upon Thames

Green Lane Primary and Nursery School



IT and Computing Policy

Rationale:

A high-quality IT and Computing education is essential for equipping children for success in the modern world. Through effective teaching of computer science, our learners will gain an understanding of how digital systems work and how to use this knowledge to create a range of programmes and control systems. Computing also ensures that pupils become digitally literate, allowing them to use, express themselves and develop ideas through information and communication technology.

Aims and Objectives:

- Children can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Children can analyse problems in computational terms and use these skills to enhance their problem solving capabilities across the curriculum.
- Children can use information and communication technologies as an essential tool for: learning, communication, research, and controlling and understanding their environment.
- Children apply their knowledge and understanding in IT and Computing to a range of subjects and contexts, making explicit and meaningful links across subjects.
- Children can use technology responsibly.

Subject Content:

Foundation Stage:

Learners will begin to develop the crucial knowledge, skills and understanding that helps them to make sense of the world. This forms the foundation for later work in IT and Computing.

Key Stage 1

Pupils will:

- Understand what algorithms are and begin to create and debug simple programmes, using digital and physical devices.
- Use technology to purposefully create, organise, store, manipulate and retrieve digital content.
- Use technology safely and respectfully, keep personal information private and identify where to go for help and support when they have concerns about content or contact on the internet or other online technology.

Key Stage 2

Pupils will:

- Design, write and debug programmes that accomplish specific goals, including controlling or simulating physical systems. Programmes should cover the use of: selection, sequencing, repetition, variables and a range of inputs and outputs.
- Select, use and combine a variety of software (including internet services) on a range of devices to create content that accomplishes specific goals. To include: collecting, analysing, evaluating and presenting data and information.
- Understand how computer networks, including the internet, work and provide a range of services.
- Understand how to use internet search technology efficiently, becoming discerning evaluators of digital content.
- Use the internet as a tool to research and further explore a variety of topics.

- Use technology safely and respectfully, keep personal information private and identify where to go for help and support when they have concerns about content or contact on the internet or other online technology.

Assessment

Teachers continually assess children's progress in IT and Computing by making informal judgements as they observe them during each lesson. These are used to guide tailored feedback to help children move on in specific areas of their learning. At the end of a unit of work, the teacher makes a summary judgement about the work of each pupil as to whether they have yet to obtain, met or exceeded the unit objectives. This is used as a basis for assessing the progress of the child at the end of the year.

Parents are advised of pupils' progress in the annual report to parents and at Parents' Evenings.

Evidence of pupils' attainment will be collected through:

- Assessment of produced work, which is saved in pupils', designated folders.
- Children's explanations of their own learning (oral or written).
- Photographs showing activities undertaken (Especially in KS1 and Foundation Stage)

Monitoring and reporting

Planning and children's work is monitored throughout the year by the IT coordinator for progression and coverage. Feedback is given to individual staff and guidance offered as necessary. The coordinator reports to Governors annually through a written report and presentation.

Resources

Every classroom has a computer, an interactive SMART board (Or alternative means of display) and a scanner/visualiser. Each class has their own digital camera for use within lessons and school trips.

There is a bank of iPads (12) for use in class; these can be signed out by class teachers for use in any area of the curriculum.

Beebots (5) and Probots (5) are used teach the basics of programming.

Each class has a weekly one hour slot in the ICT suite (30 computers) which can be used for cross-curricular learning in addition to the teaching of IT and Computing.