# **COMPUTING POLICY**

# ST MARY'S LEWISHAM CE PRIMARY SCHOOL



# **School Vision**

To be a learning community that promotes the unique gifts, wellbeing and potential of every person. Our work is founded on the life and teaching of Jesus Christ, building on his message of equality, peace and justice, guided by his words 'As I have loved you, so you must love one another' (John 13:34).

### Mission Statement

St Mary's school serves our community by providing the highest quality of education and experiences so everyone can achieve their full potential. Faith is at the heart of our life together which celebrates our diversity. Christian values unite and guide our relationships based on respect, responsibility and forgiveness.

#### AIMS FOR COMPUTING

We aim to offer a broad and balanced curriculum that prepares pupils to use computational thinking and creativity to help them reach their full potential and 'to understand and change the world' (NC).

By the end of Key Stage 2, all pupils should be able to

- understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation. (CS)
- analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems. (CS)
- evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems. (IT)
- be responsible, competent, confident and creative users of information and communication technology. (DL)

	KS1	KS2
CS	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	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  Appreciate how [search] results are selected and ranked
IT	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively  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
DL	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	Understand the opportunities [networks] offer for communication and collaboration  Be discerning in evaluating digital content  Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

#### **SCHEME OF WORK**

Our scheme of work covers all of the requirements of the national curriculum programme of study and ensures that children access the curriculum through engaging activities and real world application. E-safety is taught in discreet lessons (see scheme of work) and should be referenced in every session taught.

#### **TEACHING AND LEARNING**

We take a discrete approach to the teaching of computing, however, teachers are encouraged to be creative and embed it into other areas of learning where possible and when it is appropriate. Where appropriate, teachers adapt the scheme of work to develop practical, creative projects that are driven by the pupils' own interests. Pupils should work independently sometimes but should be given the opportunity to problem solve in pairs and small groups as often as possible as this is how coding is done in real life. Also, teachers are encouraged to look for an audience for pupils' work, whether they're presenting to one another, writing for a public blog, creating software or digital content for younger pupils, or planning to upload their work for others to see.

#### RECORDING, MARKING, ASSESSMENT AND REPORTING

Unplugged activities should be recorded in the pupil's own computing book and online work should be saved in the class's shared folded on the Pupil Shared Area. Teachers assess children's work by making informal judgements as they observe them during lessons. The children's names are recorded on the teacher's plan as working towards, working at or exceeding expectations. This information will be monitored by the Computing Leader who will coordinate any additional action that needs to be taken in response to these assessments.

# **TIMETABLE / ORGANISATION**

Teachers should plan in enough time to cover (at least) the national curriculum expectations for computing. Computing may be taught weekly or blocked where appropriate. Additional time should be planned in if necessary to ensure that children meet national expectations.

#### **SCHOOL ENVIRONMENT**

The e-safety rules are displayed in the ICT suite and should be referred to at the start of each lesson.