



**Computing Policy
2020**

**About this policy**

This Policy was formulated in consultation with the staff and governors of Marton Manor Primary School in Autumn 2017 It was last reviewed in Spring 2020 and will be reviewed in Spring 2022 or earlier if necessary.

It reflects the school values and philosophy in relation to the teaching and learning of Computing at Marton Manor.

This document is intended for all staff with classroom responsibility, school governors, parents, inspecting teams, local authority advisors and others interested in the teaching of computing at Marton Manor Primary School.

It should be read in conjunction with: the Purple Mash scheme of work for computing, which sets out in detail what pupils in different Key Stage ability ranges will be taught; the Acceptable User Policy; the e-safety policy and the social networking policy.

# The curriculum

**Foundation Stage:**

Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

**Key stage 1 Pupils should be taught to:**

## 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 should be taught to:

## 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.

# Programmes of Study

This school along with other schools in the MAT follow the Purple Mash scheme of work. Resources for the scheme of work are online. This scheme of work is currently under review to meet the individual needs of the children and include more specific goals for Foundation Stage.

## Method of delivery

Each year group is responsible for planning each lesson, ensuring they consider hardware, software and e-safety implications as well as ensuring the objective is tailored to be accessible and to stretch their more able students. Children in Foundation stage and Key Stage 1 begin by using programmable robots and developing simple algorithms for everyday familiar processes. As they develop their understanding, children become more familiar with complex code and will begin to create their own programs. They increase their understanding of logical reasoning and can understand why some algorithms will not work.

# Monitoring and Evaluation

**Evaluative Assessment:**

* Monitoring of teaching and learning through classroom observations
* Feedback from pupil surveys
* Monitoring of medium term plan documents
* Scrutiny of children’s work

**Formative Assessment:**

Teachers will use assessment for learning tasks and questions during each lesson. Assessment notes should inform the following lesson’s objectives, highlighting children who have not met or who have exceeded expectations to inform consolidation and challenge expectations for the following lesson.

**Summative Assessment:**

Purple mash includes tools for assessing and tracking pupils and this is currently in review.

# Inclusion and Equal Opportunities

Children are considered as individuals with particular needs and potentialities. Each child is encouraged and supported to reach their full potential. All children, girls and boys, those with low attainment, irrespective of ethnic and social background should feel comfortable using computers and technology.

## Special Educational Needs

Careful planning and reflection after each session should ensure that all children are supported with appropriate expectations, resources and adult support. Children should work at an appropriate level of difficulty. Advice can be sought from the SENCo, Computing Leader or Head teacher.

**Resources**

ICT resources at Marton Manor Primary School are continually being developed and reviewed. The subject leader supported by the technician will offer advice and INSET on new equipment and technologies and support their introduction into classrooms use.

Every class has access to Multimedia PC’s and printers. Each class is connected to the Internet via broadband connection. Tablets are available in the school office for staff and pupil use which connect to the Internet via wi-fi.

## Non-Computer and Cross-Curricular Resources

Other resources can be provided if teaching staff feel children would benefit from utilising this equipment.

* Ipads (apps provided for all subjects)
* Microphone voice recorders (Speaking and Listening)
* Bee bots (Position and Direction)
* Data loggers (Maths and Science)
* Stop watches (Maths, Science and Physical Education) - MIDI Keyboards
* Green Screen facilities for video presentations.