**Computing Policy – Cam Woodfield Junior School – 2019/2020 (updated 2021/2022)**

**Intent:**

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 Cam Woodfield Junior School 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. Throughout the teaching and learning of Computing, we spend time on the Retrieval of Knowledge from prior learning before accumulating more Sticky Knowledge, enabling children to progress in their Computing knowledge and skills by knowing more, remembering more and being able to do more.

**Implementation:**

 • 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.

 **Impact:**

• 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.

**Covid Requirements:**

To ensure the safety of the children and staff, new measures for teaching Computing have been put in place since March 2020 in relation to Covid, that have altered the usual implementations for teaching Computing at our school.

These new measures include:

* Borrowing of equipment from external providers, to support the delivery of units, is not possible at the moment.
* Children to sit facing the wall, not using the central parting of the Computing suite.
* Visitors and external links are to be contacted via online systems and are unable to run workshops and talks within the school.
* Assemblies and whole school events are unable to take place, unless completed virtually.
* Equipment is cleaned using specified cleaning products at the end of each session. It is the adult’s responsibility to ensure that all Computing equipment is cleaned **before** the next group arrive.

**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.

**Entitlement**

The pupil’s entitlement to Computing is based upon the Programmes of Study for Computing as defined in the 2016 National Curriculum. The schemes of work used to deliver these programmes of study are:

Online Safety – Planned by teachers - Computer Programming – Rising Stars - Presentational skills – Rising Stars

From Years 3-6 children will study the following:

-Online Safety

-Computer Programming

-Presentation skills

**Implementation**

Pupils will have the opportunity to develop their Computing capability in the core and foundation subjects. For details of specific applications, see the 2016 National Curriculum for all other curriculum areas. Opportunities provided by the class teacher will enable the children to work both individually and in small groups. For all Computing lessons the teacher will ensure that interactive strategies are used; teacher modelling is used; introductions are included and plenary sessions are incorporated to meet the learning objectives as per the Teaching Timeline in the Teaching and Learning policy.

In this school, pupils will have experience with networked PCs, printers, Bee-Bots, Pixies, data logging equipment, sensing equipment, calculators, digital media, Interactive Whiteboards, laptops and voting systems. They will also have experience with the Internet and a variety of software that allows teachers to provide for progression of skills, concepts and applications.

As an inclusive school, Computing is made accessible to children with Special Educational Needs, by providing them with suitable software and tasks, and with extra support in the use of software packages and peripherals available.

 **Assessment**

The pupil’s work in Computing is assessed continuously throughout the topics that are taught. Records are kept in the form of teacher evaluations, saved work in the Student Hand-In folder and recorded data on Pupil Tracker. Each class across Year groups 3-6 have evidence in their theme books containing work and evaluations from lessons. A range of abilities are usually targeted and every pupil in the school will be accessed throughout the academic year.

**Management**

The Computing Curriculum Leader and Senior Management are responsible for the implementation of this Policy; the management and repairs of Computing resources through School Based Curriculum Support, monitoring Computing standards of achievement and progression, and working with SLT to arrange appropriate Inset for all members of staff where necessary. EDIT currently supply a Computing Technician for the school to support with technical matters. The Class Teachers are responsible for the delivery of this policy and the care and security of the hardware and software. The school is committed to the ongoing resourcing of Computing equipment and software, in relation to the School Development Plan. The school is responsible for ensuring that copyright regulations are not infringed.