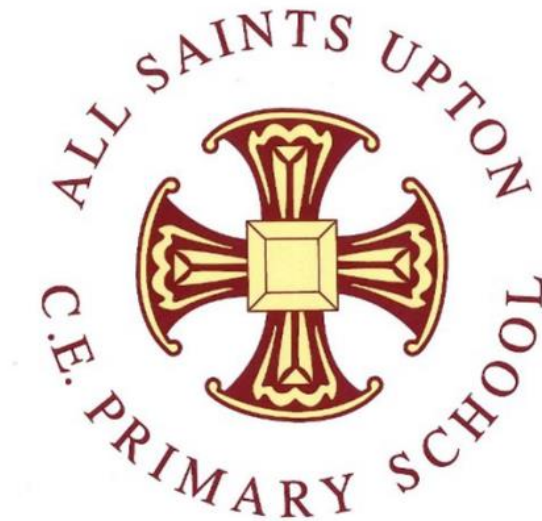# ALL SAINTS UPTON C.E. PRIMARY SCHOOL
COMPUTING POLICY

SUMMER 2023

Introduction
This policy is intended to describe the aims, principles and strategies for the teaching and learning of Computing at All Saints Upton C.E Primary School.
The use of computers and computer systems is an integral part of the National Curriculum and knowing how they work is a key life skill.
The purpose of this policy is to state how the school intends to make this provision.

Purpose
We believe that an engaging and motivating Computing curriculum will enable our learners to value the contributions that technology can make for the benefit of all pupils, staff, parents and governors. We strive to provide safe opportunities in all subjects to motivate and inspire pupils and raise standards across the curriculum. They will use computational thinking and creativity to understand and change the world whilst making deep links with other if not all curriculum subjects. Our pupils will become digitally literate, they will be able to express themselves and develop ideas through the use of information and communication technology

Aims & Objectives
- The Computing Subject Leader and leadership team support staff to deliver a high quality computing education.
- Provide all pupils with a broad, balanced, challenging and enjoyable curriculum.
- Provide pupils with the computational skills necessary to become independent learners.
- Promote safe and sensible use of technology, through dedicated e-safety lessons and how to use computers and digital tools responsibly.
- To meet the requirements of the national curriculum programmes of study for Computing at Key Stage 1 and 2.
- To commit to the Continuous Professional Development of Computing.
- To provide our pupils with an understanding of the role technology plays in everyday life at present and its importance in the future.

The National Curriculum for Computing aims to ensure that all pupils:

- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- 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 information and communication technology.

By the end of key stage 1 pupils are taught to:

• Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.
• Write and test simple programs.
• Use logical reasoning to predict the behaviour of simple programs.
• Organise, store, manipulate and retrieve data in a range of digital formats.
• Communicate safely and respectfully online, keeping personal information private, and recognise common uses of information technology beyond school.

By the end of key stage 2 pupils are taught to:

• Design and write 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; generate appropriate inputs and predicted outputs to test programs.
• Use logical reasoning to explain how a simple algorithm works 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.
• Describe how internet search engines find and store data; use search engines effectively; be discerning in evaluating digital content; respect individuals and intellectual property; use technology responsibly, securely and safely.
• Select, use and combine a variety of software (including internet services) on a range of digital devices to accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

Organisation & Delivery
Computing is delivered one lesson per week which is approximately one hour long. We follow a whole school approach to our lessons. We have dedicated curriculum time with weekly lessons and celebrate Safer Internet Day annually. Computing is taught through and in other subjects and curriculum areas. Our computing curriculum is taught closely linked to our progression of skills document. All classes cover the three areas of Computing; Information Technology, Digital Literacy and Computer Science over the academic year.

Resources
The Teach Computing Scheme of Work is an online resource enabling all teachers to have instant and continuous access to the resources they need to teach lessons. The school has a range of resources to support the delivery of the Computing curriculum, the Early Years Framework and learning across all areas of the National Curriculum. The Computing Lead will keep up to date with new technologies and will review the school's provision, as well as maintain the existing resources in partnership with the school's technology support provider.

Early Years
- All areas of learning and development are important and inter-connected.
- Pupils build confidence to use technology purposefully to support their learning for all Early Learning Goals as appropriate.
- Pupils in Foundation Stage class will have experiences using technology indoors, outdoors and during timetables sessions using the computers and iPads.

Monitoring & Evaluation
The Subject Leader monitors the effectiveness of the teaching of computing provided throughout the school. This will be done through regular termly observations with feedback given to teachers delivering computing lessons. The Subject Leader and class teacher will together monitor the learning and progression made by pupils across the school. They will also encourage cross-curricular topics being taught using computing technology.

Assessment is carried out informally by the class teacher. Computing work will be recorded and evidenced in a variety of forms; e.g. photographs as well as written work, and recorded in the class computing book and also uploaded screenshots that are annotated with be put on children's Seesaw journal. There are also end of units assessments in Key Stage 2 for children to complete.

Subject Leader
The Subject Leader will be in close liaison with all members of staff and will ensure that the school curriculum is implemented in accordance with this policy by:
- Keeping up to date with developments in computing education.
- Attend, lead and disseminate CPD and provide support to staff as needed.
- Writing a yearly action plan, and being proactive in carrying it out.
- Reporting to School Governors as appropriate.
- Monitoring and evaluation, in line with the school's Monitoring and Assessment Timetable.
- Assessing progress using pupil voice.

Equal Opportunities
- Computing is taught in accordance with our school's Equality Opportunity Policy.
- All pupils have equal access to the curriculum and to the use of technology regardless of their race, sex, religious belief or ability.
- The youngest pupils in Reception class begin to use and learn about Computing as soon as it is practicable after entering school, so that they gain confidence in using computers as soon as possible.
- The Computing curriculum makes contributions to pupils' spiritual, moral, social and cultural (SMSC) development and awareness of Prevent.
- This policy is linked to the school's E-Safety policy, RSE policy, the School's Ethos and Vision and our Christian and British values.