**Southwick Community Primary School**

**Computing Policy July 2021**

**Introduction**

The use of information and communication technology is an integral part of the National Curriculum and is a key skill for everyday life. Computers, tablets, programmable robots, digital and video cameras are a few of the tools that can be used to connect, communicate, code and collect information. At Southwick Community Primary 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 use it effectively.

**Aims**

The school’s aims are to:

* Meet the requirements of the National Curriculum programmes of study for computing.
* Provide a relevant, challenging and enjoyable curriculum for computing for all pupils.
* Use ICT and 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 ICT and computing throughout their later life.
* To develop the understanding of how to use ICT and computing safely and responsibly.

**Objectives**

**Through Reception Computing learning units we will aim to teach pupils:**

* To develop the skills to recognise potential dangers and act accordingly to keep themselves and others safe.
* To begin to understand what information should be kept safe when using the internet.
* Complete a simple computer program
* Perform simple functions using mouse and keyboard
* Log on to a computer network such as the school’s Learning Platform
* Use appropriate internet-based games and activities to support their learning.
* Using the keyboard to input the alphabet in lower and upper case, using the space bar in between each letter.
* Using the keyboard to write their own name, holding the ‘SHIFT’ key for the capital letter.
* Playing simple games on a site such as CBeebies

**Through Year 1 Computing learning units we will aim to teach pupils:**

* + To develop the skills to recognise potential dangers and act accordingly to keep themselves and others safe.
	+ To begin to understand what information should be kept safe when using the internet.
	+ To begin to develop typing and word processing skills.
	+ To have some knowledge of the location of letters and symbols on the keyboard.
	+ To begin to apply mouse and trackpad skills by launching applications, manipulating windows and opening and

saving files and folders.

* + To begin to develop basic computer skills in order to use a desktop or laptop computer.
	+ To begin to understand the principles of programming.
	+ To understand an algorithm as a set of step-by-step instructions.
	+ To begin to understand why it is important to be precise when writing an algorithm.
	+ To develop a sense of creating, debugging and logical reasoning.
	+ To apply computer skills in a painting application on a computer or tablet device

**Through Year 2 Computing learning units we will aim to teach pupils:**

* To recognise a range of search engines, including Google, Bing and Yahoo
* How to use a search engine using one word to find information.
* How to follow links.
* To be able to create, test and debug algorithms.
* To begin to use directional language (forwards, backwards, quarter turn).
* To be able to create, test and debug algorithms.
* To master specific techniques with design-based software.
* To use a mixture of styles and skills learnt to produce own computer-painted work.
* To be able to make a simple presentation using learnt skills.
* To know how to save files in a folder

**Through Year 3 Computing learning units we will aim to teach pupils:**

* To support and use each other when using the internet and all digital media, in a safe and secure way.
* To behave in a manner that will reduce risk and enable them to experience all the positive opportunities which are available to them online.
* To discuss and begin to form opinions about some of the issues raised by the use of ICT and internet safety.
* That algorithms are a sequenced structure of instructions that can be changed.
* To break down problems into smaller parts (decomposing).
* That media processing programs can be used to present information.
* The different ways presentations can be edited on media processing programs.
* How to use video and audio in presentations.
* To understand the importance of word order when searching.
* To begin to distinguish between a reliable and unreliable website or webpage.
* To continue to identify ways of communicating online and understanding how they can keep safe.
* The benefit of being able to identify problems in an algorithm and being able to ‘debug’ them.
* That algorithms are used in everyday life.
* To understand that a database is a source of information that can be recorded in a number of different ways.
* Databases can be used as a tool to convert data to be presented in different ways.

**Through Year 4 Computing learning units we will aim to teach pupils:**

* To support and use each other when using the internet and all digital media, in a safe and secure way.
* To behave in a manner that will reduce risk and enable them to experience all the positive opportunities which are available to them online.
* To understand that word processing documents are used to organise information.
* To be able to utilise a number of features on a word processing program.
* Understand that animation is a sequence of pictures that are manipulated to appear as moving images.
* To use logical reasoning to explain how some simple algorithms work.
* Understand that prediction, trial and error are important when controlling devices to achieve a specific outcome.
* Be able to discuss a minimum of two different styles of animation and compare and contrast the good and bad points.
* To use and apply skills learnt previously in a project that involves designing, creating and evaluating a character.
* To use word processing and media processing programs to display information.

**Through Year 5 Computing learning units we will aim to teach pupils:**

* To understand the concept of copyright and what that means when using the internet.
* To understand that plagiarism is the act of using someone else’s work and pretending it is your own.
* To understand that permission is needed when publishing peoples’ work.
* To understand the steps needed to design and create an algorithm.
* To have the ability to spot errors in an algorithm and debug it.
* Ability to use a range of multimedia and word processing packages (Pages).
* Understand that a hyperlink links one page to another using a highlighted word or image.
* Explain and evaluate what features makes good quality audio content.
* To be able to use the internet as a tool for communication with other people using different means, comparing blog posts with email
* To understand that different searches can be carried out on a database to refine your search.
* To be able to distinguish the difference between AND & OR searches on a database.

**Through Year 6 Computing learning units we will aim to teach pupils:**

* To be able to discuss the consequences of cyberbullying.
* To support and use each other when using the internet and all digital media, in a safe and secure way.
* To behave in a manner that will reduce risk and enable them to experience all the positive opportunities which are available to them online.
* To be able to write commands using simple coding language.
* To ensure a sequence is present when coding and understand the importance of this in relation to the desired outcome.
* To begin to understand the basic functions involved in creating spreadsheets.
* To be able to explain the purpose of a spreadsheet and how they are useful.
* Be able to effectively evaluate own and others’ work.
* Be able to discuss the purpose and audience of a presentation/piece of work.
* Be able to use a multimedia package using basic tools to create a presentation.
* To understand some of the different aspects that go into making movies (locations, props, camera, sound etc)
* To be able to use video editing software to create a short film
* To be able to critically evaluate own and others’ work suggesting ways in which it can be improved/edited
* To be able to discuss the different features of a webpage and understand that webpages are another form of communication.

**Resources**

We have a computer and interactive whiteboard available in every classroom. There is a computer suite alongside a trolley of laptops and a set of iPads in each phase. These are available for use throughout the school day as part of computing lessons as well as for cross-curricular use.

**Online resources**

We have bought into the following to give pupils safe access to online education opportunities in and out of school. These are:

• Times Tables Rockstars

• Accelerated Reader

• Purple Mash

Pupils have passwords that can be used to access these sites. Pupils have been shown how to use them and how to keep their passwords safe from others.

**Planning**

The Computing Curriculum is split into four threshold concepts (Code, Connect, Communicate and Collect). Each year group has a list of objectives as well as suggested programmes and APPs to use. This is to ensure a broad, structured and progressive approach to learning with clear progression. Threshold Concepts are taught at set times throughout the school so that progression can be monitored.

**Assessment**

• Formative assessments are carried out during and following short focussed tasks and activities. They provide pupils and teaching staff the opportunity to reflect on their learning in the context of the agreed success criteria. This feeds into planning for the next lesson or activity.

We assess the children’s work in computing by making informal judgements as we observe and talk to the children during lessons. On completion of each unit of work, children save their work into their folder in the K:// drive on the school network. Examples are then shared half termly with the computing subject leader and displayed in the computer room. This demonstrates the expected level of achievement in computing for each age group in the school.

**Monitoring and Reviewing**

Monitoring and Reviewing The monitoring of the standards of the children’s work and of the quality of teaching in computing is the responsibility of the computing subject leader. The computing subject leader is also responsible for supporting colleagues in the teaching of computing, for keeping informed about current developments in the subject and for providing a strategic lead and direction for the subject in the school.

**Inclusive Teaching**

At Southwick Community Primary School, we teach computing to all children, whatever their ability, age, gender or race. Computing forms part of our school curriculum policy to provide a broad and balanced education for all children. We provide learning opportunities that are matched to the specific needs of children with learning difficulties. In some instances the use of ICT has a considerable impact on the quality of work that children produce; it increases their confidence and motivation and allows access to parts of the curriculum to which the children would otherwise not have had. When planning work in computing, we take into account any targets which are evident on a pupils’ support plan. If teachers identify children who are gifted and talented in the area of computing, it is the teacher’s responsibility to ensure that these children are suitably challenged in their use of ICT and computing both in specific computing lessons and in using ICT in other curriculum areas.

**Reviewing the Policy**

The policy will be reviewed July 2022 and annually thereafter.