Subject	Computing
Overview	National Curriculum Overview
Intent	The Aims of Computing
	KS1
	<ul> <li>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</li> <li>Create and debug simple programs</li> <li>Use logical reasoning to predict the behaviour of simple programs</li> <li>Use technology purposefully to create, organise, store, manipulate and retrieve digital content</li> <li>Recognise common uses of information technology beyond school</li> <li>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</li> </ul>
	KS2
	<ul> <li>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</li> <li>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</li> <li>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</li> <li>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>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</li> <li>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about</li> <li>content and contact.</li> </ul>
Planning provision	How are lessons, schemes of work, units sequenced to help make pupils
Implementation	progress?  How is Computing timetabled, delivered, staffed & resourced?

Our Computing curriculum is designed to equip children with skills and understanding to live in a technological world; this includes being able to use a variety of computer software and coding programmes. There is an importance on Online Safety for all year groups.

Computing sessions are delivered regularly. Computing is also used in a cross curricular way and is an important tool for learning in our technological world.

Computing will be delivered by either the class teacher and/ or a HLTA who has received training and guidance on the subject.

We undertake regular reviews of our technology and software to ensure the best provision is maintained.

# Example of sequence of learning

## How does Computing build on prior knowledge & understanding?

A coherent long term plan where pupils get plenty of opportunities to revisit and recall previous learning.

### Key Stage 1

Lesson 1: Launch the coding software and look at basic commands as a class

Lesson 2: How to access programme on computers and find the buttons

Lesson 3: simple 1 step code to move forward

Lesson 4: simple 1 step code to move backwards

Lesson 5: simple 1 step code to move sideways

Lesson 6: Can you join the previously learned commands

## Key Stage 2

#### Coding:

Pupils will learn to use a coding programme to achieve a specific goal such as:

Lesson 1 Creating a simple programme to achieve 1 outcome i.e. turning a light on or off

Lesson 2 Adding steps to the programme to change colour/ duration and sequence of the light turning on or off

	Lesson 3 Using variables such as repeat/ loop to create a sequence that lasts for a chosen period of time  Lesson 4 Create a sequence of code based upon a set of instructions  Lesson 5 Use a pre-made sequence of code to debug
Assessment	Focus on end of unit objectives
Impact	Example for KS2 coding
	Pupils give a problem solving type of activity based around the topic. Pupils would be asked to solve/ fix the problem and show the steps (screenshots, slides or other) of how they did this. This will show their application of skill and knowledge.
CPD	How do we ensure teachers are equipped?
	Staff meetings e.g. Google Classroom training
	CPD where appropriate and available