



# Year 6



## Computing Skills Progression

	<b>Year Group</b>	<b>6</b>	<b>Class</b>		<b>Teacher</b>	
<b>UNIT</b>	<b>TERM 1</b>		<b>TERM 2</b>		<b>TERM 3</b>	
<b>TOPIC</b>						

### Computing Programme of Study

#### Purpose of study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

#### Aims

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.

#### Skills Progression

Throughout the year, pupils are expected to learn, apply and understand the following skills and processes in age appropriate tasks and activities.

They should be taught to:

#### Networks

- understand how computer networks enable computers to communicate and collaborate
- begin to use internet services within their own creations to share and transfer data to a third party

#### Using Computer

- independently select, use and combine a variety of software to design and create content for a given audience, including collecting, analysing, evaluating and presenting data and information
- design and create a range of programs, systems and content for a given audience
- independently select, use and combine a variety of software to collect, analyse, evaluate and present data and information

#### E-Safety

- use technology respectfully and responsibly
- identify a range of ways to report concerns about content and contact in and out of school

#### Net Searching

- be discerning when evaluation digital content
- use filters in search technologies effectively and is discerning when evaluating digital content

#### Coding

- include use of sequences, selection and repetition with the hardware used to explore real world systems
- solve problems by decomposing them into smaller parts
- create programs which use variables
- use variables, sequence, selection and repetition in programs
- use logical reasoning to explain how increasingly complex algorithms work and to detect and correct errors in algorithms and programs efficiently



# Year 6 Computing Skills Progression



Year Group			Class			Teacher		
UNIT	TERM 1		TERM 2		TERM 3			
TOPIC								
Knowledge & Skills								
Pupils who are working above expectations								
Total number of pupils in class								
Pupils who have not yet reached expectations								
Teacher Comments								
Subject Leader Action								