



Year 4

Progression in Computing

Key Stage 2 Computing Statutory Coverage

Computer Science- programming

Pupils should be taught to:

1. Design, write and debug programs to achieve specific goals, including solving problems
2. Use sequence, selection and repetition in programs; work with variables and various forms of input and output
3. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs

Computer Science- theory

4. Understand computer networks including the internet; how they can provide multiple services such as the World Wide Web

Information Technology

Pupils should be taught to:

1. Use search technologies effectively
2. Select, use and combine a variety of software (including the internet) 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

Digital Literacy

Pupils should be taught to:

1. Be discerning in evaluating digital content and appreciate how search results are selected and ranked
2. Understand the opportunities networks offer for communication and collaboration
3. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact

Key Objective	Key Skills
<p><u>Computer Science- programming</u></p> <ol style="list-style-type: none"> 1. Design, write and debug programs to achieve specific goals, including solving problems 2. Use sequence, selection and repetition in programs; work with variables and various forms of input and output <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<ul style="list-style-type: none"> -Write instructions for a sprite to follow in Scratch -Use conditional statements (if... then) within an animation -Use repeat events in programs -Make improvements to make animation more exciting
<p><u>Computer Science- theory</u></p> <ol style="list-style-type: none"> 3. Understand computer networks including the internet; how they can provide multiple services such as the World Wide Web 	<ul style="list-style-type: none"> -Describe uses of technology and the impact of technology -Understand how stimulations and robots are used -History of computing timeline

<p><u>Information Technology</u></p> <ol style="list-style-type: none"> 1. Use search technologies effectively 2. Select, use and combine a variety of software (including the internet) 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 	<ul style="list-style-type: none"> -Plan, design and create and improve their own multimedia presentation (PowerPoint, Publisher, Word etc) showing awareness of audience -Spreadsheets: choose, print and annotate appropriate graphs to answer simple questions e.g. bar charts, or pie charts and interpret data
<p><u>Digital Literacy</u></p> <ol style="list-style-type: none"> 1. Be discerning in evaluating digital content and appreciate how search results are selected and ranked 2. Understand the opportunities networks offer for communication and collaboration 3. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 	<ul style="list-style-type: none"> -Understand copyright and plagiarism -Explore what it means to be responsible and respectful online to become good digital citizens - Understand what is cyber bullying -Understand how to keep themselves safe online when gaming and how to report concerns