



# Year 3

## 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

<b>Key Objective</b>	<b>Key Skills</b>
<p><b><u>Computer Science- programming</u></b></p> <ol style="list-style-type: none"> <li>1. Design, write and debug programs to achieve specific goals, including solving problems</li> <li>2. Use sequence, selection and repetition in programs; work with variables and various forms of input and output</li> </ol> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<p>-Explain what computer programming is and how algorithms work</p> <p>-Control an object to move along a route</p> <p>-Follow a code sequence e.g. using Scratch cards</p>
<p><b><u>Computer Science- theory</u></b></p> <ol style="list-style-type: none"> <li>3. Understand computer networks including the internet; how they can provide multiple services such as the World Wide Web</li> </ol>	<p>-Identify computing components e.g. router, processor, inside an iPad</p> <p>-Understand how computers store data</p>
<p><b><u>Information Technology</u></b></p>	<p>-To type quickly and correctly</p>

<ol style="list-style-type: none"> <li>1. Use search technologies effectively</li> <li>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</li> </ol>	<ul style="list-style-type: none"> <li>-To type and design a printable document</li> <li>-To present text using different effects</li> <li>-Cut, copy and paste between applications</li> <li>-Use spell checker</li> <li>-Delete, insert and replace text using mouse or arrow keys</li> </ul>
<p><b><u>Digital Literacy</u></b></p> <ol style="list-style-type: none"> <li>1. Be discerning in evaluating digital content and appreciate how search results are selected and ranked</li> <li>2. Understand the opportunities networks offer for communication and collaboration</li> <li>3. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> </ol>	<ul style="list-style-type: none"> <li>-Understand that not all information online is trustworthy e.g. SMARTcrew video by Childnet</li> <li>-Know and understand the five SMART rules</li> <li>-Understand what is personal information and the importance of creating a powerful password</li> <li>-Understand the importance of showing respect online and how to achieve this</li> </ul>