











## **Computing Long Term Plan - Year 5/6**


- 1.Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- 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
4. 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
5. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
6. 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
7. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

### **Computing Intent**

*Pupils will become confident and responsible digital citizens. They will develop computational thinking and key skills to promote resilience when creating digital content. Pupils will develop strategies to build healthy online relationships and engage positively with online technologies.*

Term	Online Safety Focus Access <a href="https://projectevolve.co.uk/">https://projectevolve.co.uk/</a> Clare Head is admin.	Barefoot Computing Unit	Additional teaching suggestions (alternatives to Barefoot/Basic skills to be covered during topic lessons)
<b>Cycle A (Y1,3,5)</b>			
Autumn Term  Objective 5 Objective 4 Objective 6 Objective 7	<b>Privacy &amp; Security (Y5)</b>    <b>Online Bullying (Y5)</b>  	<u>Year 5 - Digital Content:</u>  <i>Barefoot: Barefoot: Network hunt activity</i> <i>Barefoot: Solar system simulation</i>	Typing practice ( <i>Purple Mash</i> )  <i>Google Docs/Slides</i> - use app to present final draft or topic work   (Year 5)  Hour of Code Solar System- Star Wars, Design your own Solar System (coding
Spring Term  Objective 1 Objective 2 Objective 3 Objective 6 Objective 7	<b>Online Relationships (Y5)</b>    <b>Online Reputation (Y5)</b>    Look at football player Kurt Zouma <a href="https://www.bbc.co.uk/sport/football/60312876">https://www.bbc.co.uk/sport/football/60312876</a>	<u>Year 5 - Using Data:</u>  <i>Barefoot: Pizza party – an introduction to data modelling</i>  <u>Year 5 - Scratch, Algorithms &amp; Debugging:</u>  <i>Barefoot: Scratch maths quiz selection</i>  <i>Barefoot: Scratch maths quiz variables</i>	 Scratch <a href="https://scratch.mit.edu/">https://scratch.mit.edu/</a> Create a jumping game.  )  Typing practice ( <i>Purple Mash</i> )  <i>Google Slides/Docs</i> - use apps to present final draft or topic work

Summer Term  <b>Objective 1</b> <b>Objective 2</b> <b>Objective 3</b> <b>Objective 6</b> <b>Objective 7</b>	<b>Self-Image &amp; Identity (Y5)</b>  	<u>Year 5 - Scratch, Algorithms &amp; Debugging:</u>  <i>Barefoot: Variables unplugged activity</i>	Typing practice ( <i>Purple Mash</i> )  <i>Google Slides/Docs</i> - use apps to present final draft or topic work
<b>Cycle B (Year 2, 4, 6)</b>			
Autumn Term  <b>Objective 5</b> <b>Objective 6</b> <b>Objective 7</b>	<b>Copyright &amp; Ownership (Y6)</b>  	<u>Year 6 - Digital Content:</u>  <i>Barefoot: Ranking search activity</i>	Typing practice ( <i>Purple Mash</i> )  <i>Google Docs/Slides</i> - use app to present final draft or topic work
Spring Term  <b>Objective 1</b> <b>Objective 2</b> <b>Objective 3</b> <b>Objective 6</b> <b>Objective 7</b>	<b>Self-Image &amp; Identity (Y6)</b>    Health & Wellbeing (Y6)  	<u>Year 6 - Scratch, Algorithms &amp; Debugging:</u>  <i>Barefoot: Logical number sequences</i>  <i>Barefoot: Crystal flowers - PRIMM1</i>  <i>Barefoot: Crystal flowers - PRIMM2</i>  <i>Barefoot: Code cracking 1 of 6</i>  <i>Barefoot: Code cracking 2 of 6</i>  <i>Barefoot: Code cracking 3 of 6</i>  <i>Barefoot: Code cracking 4 of 6</i>  <i>Barefoot: Code cracking 5 of 6</i>	Typing practice ( <i>Purple Mash</i> )  <i>Google Docs/Slides</i> - use app to present final draft or topic work

		<i>Barefoot: Code cracking 6 of 6</i>	
Summer Term	<b>Managing Online Information (Year 6)</b> 	<u>Year 6 - Programming:</u>  <i>Barefoot: Investigating inputs activity</i>  <i>Barefoot: Investigating outputs</i>  <i>Barefoot: Classroom sound monitor</i>  <i>Barefoot: Make a game project</i>	Typing practice ( <i>Purple Mash</i> )  <i>Google Docs/Slides</i> - use app to present final draft or topic work

Programming	Data Handling and Multimedia	Digital Literacy and Online Technologies	Online Safety	Basic ICT skills
Key Stage One				
Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions  Create and debug simple programs	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Recognise common uses of information technology beyond school	Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have	

Use logical reasoning to predict the behaviour of simple programs			concerns about content or contact on the internet or other online technologies	
<b>Key Stage Two</b>				
<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p>	<p>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</p>	<p>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.</p> <p>Use search technologies effectively, appreciate how [search] results are selected and ranked and be discerning in evaluating digital content .</p>	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	

