



Brocklewood Primary and Nursery School Computing Progression Map



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.

Our Vision:

At Brocklewood we imagine, believe, achieve.

Our children have the opportunity to choose when to use technology as a powerful tool to enhance their learning. Our children are challenged to communicate and collaborate in different ways developing skills and knowledge they will need to be successful 21st century global citizens. Our children are confident users of technology and are leaders of learning and teachers in their own right. Technology is a key tool in removing barriers for our pupils, ensuring equity of opportunity. ****Add in about problem solving – national curriculum****

Technology will support teachers to work collaboratively and efficiently to enhance the learning experience and reduce workload. Teachers will have access to best practice globally to improve pedagogy to produce independent learners.

Being a computer scientist in KS1

Pupils should be taught to:

- ♣ 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 logical reasoning to predict the behaviour of 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 concerns about content or contact on the internet or other online technologies

Being a computer scientist in KS2

Pupils should be taught to:

- ♣ design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- ♣ use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- ♣ use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- ♣ 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
- ♣ use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- ♣ 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
- ♣ use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Computer Science	Information Technology	Digital Literacy
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Overview – Cycle A

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYF5	Online Relationships	Online Reputation	Online Bullying	Managing Online Information	Health, Wellbeing and Lifestyle	Self-Image and Identity
	Codeapillars	Taking Photos - iPads	Green Screen	Programming – Go Digital	Researching – Google/Earth	
Y1/2	Self-Image and Identity/Online Relationships	Recording a Poem – Voice Memo	Online Reputation/Online Bullying	Programming - Rodacoda	Managing Online Information/Health, Wellbeing and Lifestyle	News Reports - iMovie
	Computer Skills - Word		Leaflet - Word		Programming - BeeBots	
Y3/4	Self-Image and Identity/Online Relationships	Publishing stories - Word	Online Reputation/Online Bullying	Programming - Rodacoda	Managing Information Online/Health, Wellbeing and Lifestyle	Speech Support - Keynote
	Programming - Rodacoda		Research and create presentation - PowerPoint		Programming - Rodacoda	
Y5/6	Self-Image and Identity/ Online Relationships	Sponsorship Form - Word	Online Reputation/Managing Online Information	Welcome Pack – Book Creator	Healthy, Wellbeing and Lifestyle/Privacy and Security	Inclusion Video - iMovie
	Programming - Rodacoda		Programming – Micro:Bit		Programming - Rodacoda	

All Years – Safer Internet Day – Spring 1

Overview – Cycle B

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYF5	Privacy and Security	Copyright and Ownership	Online Relationships	Self-Image and Identity	Online Bullying	Health, Wellbeing and Lifestyle

	Codeapillars/BeeBots	Taking a Selfie - iPads	Computational Thinking - Smoothie/Sandwich	Programming - Go Digital	Recording a performance - iPads	Record voice - Voice Memo
Y1/2	Privacy and Security/Copyright and Ownership	Programming - Rodacoda	Online Bullying/Online Relationships	Programming - Rodacoda	Managing Online Information/Online Reputation	Programming - Rodacoda
	Computer Skills - Word		Taking Photo's/Video - iPads		Design T-Shirt - iPads	
Y3/4	Privacy and Security/Copyright and Ownership	Online Bullying	Online Bullying/ Online Reputation	Programming - Rodacoda	Managing Information Online/Privacy and Security	Leaflet - Word
	Write emails - Word?	Create a Poster/Presentation - PowerPoint	Programming - Rodacoda		Programming - Rodacoda	
Y5/6	Privacy and Security/Copyright and Ownership	Creating a brochure - Word	Online Bullying/Self-Image and Identity	Programming - Micro:Bits	Managing Online Information/Online Reputation	CEO Presentation - PowerPoint
	Programming - Rodacoda		Programming - Rodacoda		Wellbeing Podcast - Garage Band	

All Years - Safer Internet Day - Spring 1

Cycle A

EYF5	Autumn		Spring		Summer	
	Online Relationships - ProjectEvolve	Online Reputation - ProjectEvolve	Online Bullying - ProjectEvolve	Self-Image and Identity - ProjectEvolve	Health, Wellbeing and Lifestyle - ProjectEvolve	Self-Image and Identity - ProjectEvolve
	3 Circle Times	3 Circle Times	3 Circle Times	3 Circle Times	3 Circle Times	3 Circle Times
	Programming - Codeapillars	Taking Photos - iPads	Green Screen - iMovie	Programming - Go Digital	Researching - Google/ Google Earth	
	Free Play	Free Play	3 visits to computing suite.	Free Play on IWB or iPads		

Year 1/2	Autumn		Spring		Summer	
	Self-Image and Identity - ProjectEvolve	Recording a poem - Voice Memo	Online Reputation - ProjectEvolve	Programming - Rodacoda	Managing Information Online - ProjectEvolve	News report - iMovie
	Assembly	iPads	Assembly	Computing Suite or iPads	Assembly	Computing Suite
	Online Relationships - ProjectEvolve	3 lessons	Online Bullying - ProjectEvolve	3 lessons	Health, Wellbeing and Lifestyle - ProjectEvolve	4 - 5 lessons
	1 lesson		1 lesson		1 lesson	
	Basic computer skills - Word		Leaflet - Word		Programming - BeeBots	
	Computing Suite		Computing Suite		Computing Suite	
	2 lessons		4 lessons		2 lessons	

Year 3/4	Autumn		Spring		Summer	
	Self-Image and Identity – ProjectEvolve	Publishing stories – Word	Online Reputation – ProjectEvolve	Programming – Crumbleboards?	Managing Information Online – ProjectEvolve	Slides to support a speech – Keynote
	Assembly	Computing Suite	Assembly	Computing Suite	Assembly	iPads
	Online Relationships – ProjectEvolve	3 lessons	Online Bullying – ProjectEvolve	4 lessons	Health, Wellbeing and Lifestyle – ProjectEvolve	3 lessons
	1 lesson		1 lesson		Computing Suite	
	Programming – Rodacoda		Research and create a presentation – PowerPoint		1 lesson	
	Computing Suite		Computing Suite		Programming – Rodacoda	
	3 lessons		3 – 4 lessons		Computing Suite or iPads	
					3 lessons	

Year 5/6	Autumn		Spring		Summer	
	Self-Image and Identity – ProjectEvolve	Create a sponsorship form – Word	Online Reputation – ProjectEvolve	Create a welcome pack for a new child – Book Creator	Managing Information Online – ProjectEvolve	Inclusion video for CEO – iMovie
	Assembly	Computing Suite	Assembly	iPads	Assembly	Computing Suite
	Online Relationships – ProjectEvolve	4 - 5 lessons	Managing Information Online – ProjectEvolve	6 lessons	Privacy and Security – ProjectEvolve	6 lessons
	1 lesson		1 lesson		1 lesson	
	Programming – Rodacoda		Programming – Micro:Bits		Programming – Rodacoda	
	Computing Suite		Computing Suite		Computing Suite	
	5 lessons		5-6 lessons		5 lessons	

Cycle B

EYF5	Autumn		Spring		Summer	
	Privacy and Security – ProjectEvolve	Copyright and Ownership – ProjectEvolve	Online Relationships – ProjectEvolve	Self-Image and Identity – ProjectEvolve	Online Bullying – ProjectEvolve	Health, Wellbeing and Lifestyle – ProjectEvolve
	3 circle times	3 circle times	3 circle times	3 circle times	3 circle times	3 circle times
	Programming – Codeapillars/BeeBots	Taking a selfie – iPads	Computational Thinking – Making a smoothie or sandwich.	Programming – Go Digital	Recording a performance	Record voice – Voice Memo
	Free Play	Free Play		iPads or IWB	2-3 sessions	iPads

Year 1/2	Autumn		Spring		Summer	
	Privacy and Security – ProjectEvolve	Programming – Rodacoda	Online Bullying – ProjectEvolve	Programming – Rodacoda	Managing Online Information – ProjectEvolve	Programming – Rodacoda
	Assembly	Computing Suite	Assembly	Computing Suite	Assembly	Computing Suite
	Copyright and Ownership – ProjectEvolve	5 lessons	Online Relationships – ProjectEvolve	5 lessons	Online Reputation – ProjectEvolve	5 lessons
	1 lesson		1 lesson		1 lesson	
	Computer Skills – Word		Taking photo's/videos		Designing a T-Shirt	
	Computing Suite		iPads		iPads	
	4-5 lessons		2-3 lessons		4-5 lessons	

Year 3/4	Autumn		Spring		Summer	
	Privacy and Security – ProjectEvolve Assembly Copyright and Ownership – ProjectEvolve 1 lesson	Online Bullying – Project Evolve 1 lesson	Online Bullying – ProjectEvolve Assembly Online Reputation – ProjectEvolve 1 lesson	Programming – Rodacoda Computing Suite 5 lessons	Managing Information Online – Project Evolve Assembly Privacy and Security – ProjectEvolve 1 lesson	Leaflet Word 5 – 6 lessons
	Writing emails – Using their own Microsoft email. Draft format on word? 4 – 5 lessons.	Create a poster/presentation – PowerPoint Computing Suite 5 – 6 lessons	Programming – Rodacoda Computing Suite 5 lessons		Programming – Rodacoda Computing Suite 5 lessons	

Year 5/6	Autumn		Spring		Summer	
	Privacy and Security – ProjectEvolve Assembly Copyright and Ownership – ProjectEvolve 1 lesson	Creating a brochure – Word Laptops – Computing Suite 5-6 lessons	Online Bullying – ProjectEvolve Assembly Self-Image and Identify – ProjectEvolve 1 lesson	Programming – Micro:Bits 6 lessons	Managing Information Online – Project Evolve Assembly Online Reputation – ProjectEvolve 1 lesson	CEO Presentation – PowerPoint Computing Suite 6 – 7 lessons
	Programming – Rodacoda Computing Suite 5 lessons		Programming – Rodacoda Computing Suite 5 lessons		Wellbeing podcast – Garage Band Computing Suite 6 – 7 lessons	

