



William Penn Curriculum Map – Computing

	Autumn	Spring	Summer
Year R	Fantastic Fairytales	Amazing Animals	Helpful Heroes
Year 1/2 Cycle A	Community Heroes	Shiver and Sizzle	Oh I do like to be beside....
Year 1/2 Cycle B	Who Lives Here?	Spring Has Sprung	Back in Time for...
Year 3/4 Cycle A	Raging Rivers and Marvellous Mountains	The Roman Empire	Groovy Greeks
Year 3/4 Cycle B	Ancient Ancestors (Stone Age to Iron Age)	We're Sailing down the Nile (Ancient Egypt)	Our World
Year 5/6 Cycle A	We'll Meet Again (WWII links with Coolham airfield and Battle of Britain)	Rulers of the Rainforest (Ancient Mayan Civilization and rainforests)	Vikings (Life and Legend)
Year 5/6 Cycle B	Wonders of the Universe	Super Settlers (Anglo Saxons and Scots)	Friends And Heroes (Quakerism and Democracy) A local History Study



Cadbury- Year R Coverage:

Year R Cycle A	Fantastic Fairy tales	Awesome Animals	Helpful Heroes
Outcomes	<p>Enviroments with ICT scenarios based on experience in the real world, such as in role-play. Using the interactive whiteboard to play games</p>	<p>Pupils to gain confidence, control and language skills through opportunities to 'paint' and write on the interactive board/iPad.</p>	<p>To use the keyboard to use their individual login to access Mini Mash, developing their fine motor skills. To utilise the program Mini Mash.</p>
Early Learning Goals P of S	<p>ELG: Speaking <i>Children at the expected level of development will:</i></p> <ul style="list-style-type: none"> - Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary; - Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate; - Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and support from their teacher. 	<p>ELG: Creating with Materials <i>Children at the expected level of development will:</i></p> <ul style="list-style-type: none"> - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they have used; - Make use of props and materials when role playing characters in narratives and stories. 	<p>ELG: Fine Motor Skills <i>Children at the expected level of development will:</i></p> <ul style="list-style-type: none"> - Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases; - Use a range of small tools, including scissors, paint brushes and cutlery



Fox- Year 1 and 2 Coverage:

Year 1/2 Cycle A	Community Heroes	Shiver and sizzle	Oh I do like to beside...
Outcomes	Unit 1.1 Online safety and exploring Purple Mash Unit 2.5 Effective searching Unit 1.4 Lego builders Unit 1.9 Technology outside school	Unit 1.2 Grouping and sorting Unit 2.6 Creating pictures Unit 1.8 Spreadsheets	Unit 1.7 Coding Unit 2.1 Coding
National Curriculum P of S	Unit 1.1 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 Unit 1.4 Understand what algorithms are Understand that programs execute by following precise and unambiguous instructions Unit 1.9 recognise common uses of information technology beyond school Unit 2.5 use technology purposefully to create, organise, store, manipulate and retrieve digital content Unit 2.5 recognise common uses of information technology beyond school	Unit 1.2 use technology purposefully to create, organise, store, manipulate and retrieve digital content Unit 1.8 use technology purposefully to create, organise, store, manipulate and retrieve digital content Unit 2.6 use technology purposefully to create, organise, store, manipulate and retrieve digital content	Unit 1.7 Understand what algorithms are Understand that programs execute by following precise and unambiguous instructions Unit 1.7 create and debug simple programs Unit 1.7 use logical reasoning to predict the behaviour of simple programs Unit 1.7 use technology purposefully to create, organise, store, manipulate and retrieve digital content Unit 2.1 understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Unit 2.1 create and debug simple programs Unit 2.1 use logical reasoning to predict the behaviour of simple programs
Year 1/2 Cycle B	Who lives here?	Spring Has Sprung	Back in Time for...
Outcomes	Unit 1.1 Online safety and exploring Purple Mash Unit 1.5 Maze Explorers Unit 2.4 Questioning	Unit 2.2 Online Safety Unit 1.6 Animated Story books Unit 2.7 Making Music	Unit 2.3 Spreadsheets Unit 1.3 Pictograms Unit 2.8 Presenting ideas
National Curriculum P of S	Unit 1.5 Understand what algorithms are Understand that programs execute by following precise and unambiguous instructions Unit 1.5 create and debug simple programs Unit 1.5 use logical reasoning to predict the behaviour of simple programs Unit 2.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content	Unit 2.2 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 Unit 1.6 use technology purposefully to create, organise, store, manipulate and retrieve digital content Unit 2.7 use technology purposefully to create, organise, store, manipulate and retrieve digital content	Unit 1.3 use technology purposefully to create, organise, store, manipulate and retrieve digital content Unit 2.3 use technology purposefully to create, organise, store, manipulate and retrieve digital content Unit 2.8 use technology purposefully to create, organise, store, manipulate and retrieve digital content



Fry- Year 3 and 4 Coverage:

Year 3/4 Cycle A Outcomes	Raging Rivers and Marvellous Mountains	The Roman Empire	Groovy Greeks
	Unit 3.1 Coding Unit 3.2 Online safety Unit 3.3 Spreadsheets	Unit 3.4 Touch typing Unit 3.5 Email	Unit 3.6 Branching databases Unit 3.7 Simulations Unit 3.8 Graphing
National Curriculum P of S	<p>Unit 3.1 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>Unit 3.1 use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Unit 3.1 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Unit 3.2 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Unit 3.5 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>Unit 3.4 and 3.5 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>Unit 3.5 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Unit 3.6, 3.7 and 3.8 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>
Year 3/4 Cycle B Outcomes	Ancient Ancestors	We're Sailing Down the Nile	Our World
	Unit 4.1 Coding Unit 4.2 Online safety	Unit 4.3 Spreadsheets Unit 4.4 Writing for different audiences	Unit 4.5 Logo Unit 4.6 Animation Unit 4.7 Effectives search Unit 4.8 Hardware investigates
National Curriculum P of S	<p>Unit 4.1 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>Unit 4.1 use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Unit 4.1 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Unit 4.1 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>Unit 4.2 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>Unit 4.2 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Unit 4.3 and 4.4 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>Unit 4.5 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>Unit 4.5 use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Unit 4.5 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Unit 4.6 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</p> <p>Unit 4.7 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>Unit 4.7 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>Unit 4.8 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>



JBB- Year 5 and 6 Coverage:

Year 5/6 Cycle A	We'll Meet Again	Rulers of the Rainforest	Vikings
	Unit 5.1 Coding Unit 5.2 Online safety	Unit 5.3 Spreadsheets Unit 5.4 Databases	Unit 5.5 Game Creator Unit 5.6 3D Modelling Unit 5.7 Concept Maps
National Curriculum P of S	<p>Unit 5.1 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>Unit 5.1 use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Unit 5.1 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Unit 5.2 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>Unit 5.1 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>Unit 5.2 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>Unit 5.3 and 5.4 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>Unit 5.5 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>Unit 5.5, 5.6 and 5.7 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>
Year 5/6 Cycle B	Wonders of the Universe	Super Settlers	Friends and Heroes
	Unit 6.1 Coding Unit 6.2 Online Safety	Unit 6.3 Spreadsheets Unit 6.4 Blogging	Unit 6.5 Text Adventures Unit 6.6 Networks Unit 6.7 Quizzing
National Curriculum P of S	<p>Unit 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</p> <p>Unit 6.1 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Unit 6.1 use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Unit 6.2 understand computer networks including the internet; how they can provide multiple services, such as the world</p>	<p>Unit 6.4 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</p> <p>Unit 6.3 and 6.4 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>Unit 6.4 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a</p>	<p>Unit 6.5 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>Unit 6.5 use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>Unit 6.5 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>Unit 6.6 understand computer networks including the internet; how they can provide multiple services, such as the world</p>

02/11/2023



	<p>wide web; and the opportunities they offer for communication and collaboration</p> <p>Unit 6.2 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <p>Unit 6.1 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>Unit 6.2 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>range of ways to report concerns about content and contact.</p>	<p>wide web; and the opportunities they offer for communication and collaboration</p> <p>Unit 6.5 and 6.7 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>
--	---	--	---



William Penn Computing Skills Progression 2023 Key Stage 1 and 2

Key: Colour coding

Computer science statement	Information technology statement	Digital literacy statement
----------------------------	----------------------------------	----------------------------

Key Stage 1	
Computing P of S	Split statements
understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions	Understand what algorithms are
	Understand that algorithms are implemented as programs on digital devices
	Understand that programs execute by following precise and unambiguous instructions
create and debug simple programs	Create simple programs
	Debug simple programs
use logical reasoning to predict the behaviour of simple programs	Use logical reasoning to predict the behaviour of own program
	Use logical reasoning to predict the behaviour of others' programs
use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use technology purposefully to create digital content
	Use technology purposefully to store digital content
	Use technology purposefully to retrieve digital content
	Use technology purposefully to organise digital content
	Use technology purposefully to manipulate digital content
recognise common uses of information technology beyond school	Recognise common uses of information technology at home
	Recognise common uses of information technology at work
	Recognise common uses of information technology outdoors
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	Use technology safely
	Keep personal information private
	Use technology respectfully
	Identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies



Key: Colour coding

Computer science statement

Information technology statement

Digital literacy statement

Key Stage 2	
Computing P of S	Split statements
design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	Write programs that accomplish specific goals
	Design programs that accomplish specific goals
	Debug programs that accomplish specific goals
	Control or simulate 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 sequence in programs
	Use selection in programs
	Use repetition in programs
	Work with variables
use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Work with various forms of input and output
	Use logical reasoning to detect and correct errors in programs
	Use logical reasoning to explain how some simple algorithms work
	Use logical reasoning to detect and correct errors in algorithms
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	Understand how computer networks can provide multiple services, such as the world wide web
	Understand computer networks, including the internet
	Understand the opportunities computer networks offer for communication
	Understand the opportunities computer networks offer for collaboration
use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Use search technologies effectively
	Appreciate how search results are selected
	Appreciate how search results are ranked
	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	Select, use and combine software
	Design and create content
	Design and create systems
	Collect, analyse, evaluate and present data
	Collect, analyse, evaluate and present information
use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Use technology responsibly
	Identify a range of ways to report concerns about contact
	Recognise acceptable/unacceptable behaviour

02/11/2023

