



SHOBNALL PRIMARY & NURSERY SCHOOL

COMPUTING PROGRAMME OF STUDY



LONG TERM OVERVIEW FOR NURSERY

Curriculum Goal	Autumn (Milestone 1)	Spring (Milestone 2)	Summer (Milestone 3)
PRIMARY LINK Become a Respectful Learner	Children begin following routines, listening to simple instructions and understanding sequences of actions. These skills provide the foundations for computational thinking by learning to follow and remember simple step-by-step processes.	Children collaborate with others, listen carefully and solve simple problems together. These skills support debugging, problem solving and collaborative working when using technology.	Children become increasingly independent when solving problems, managing emotions and following routines. This resilience supports debugging, perseverance and problem solving when using technology.
Create a Picture	Children explore a range of tools and materials, learning that different tools have different purposes. This provides opportunities to compare physical creative tools with digital drawing tools when available.	Children recognise their own name and begin making controlled marks. Recognising symbols and understanding that marks represent meaning supports early digital literacy.	Children create increasingly detailed representations using greater control. These skills transfer to creating digital pictures using simple drawing applications and developing confidence with digital creative tools.
Draw a selfie			
Build a Busy Body	Children follow simple instructions during movement activities and use equipment appropriately. Listening, responding and carrying out instructions develop early algorithmic thinking and sequencing skills.	Children follow rules during games and understand simple instructions. They begin to recognise that instructions need to be completed in the correct order to achieve an outcome, linking to algorithms.	Children create and remember movement sequences. Designing and following a sequence of actions provides a practical introduction to algorithms and programming concepts.
Tell a Story	Children sequence events during pretend play and begin to retell familiar stories. Understanding that stories follow an order develops sequencing skills which underpin computational thinking.	Children retell stories and nursery rhymes in the correct sequence, making links between events and experiences. Sequencing information is a key aspect of computational thinking.	Children create and tell their own stories with a clear beginning, middle and end. Organising ideas into logical sequences mirrors computational thinking and supports later programming concepts.
Vocabulary			
Tier 1	Tier 2	Tier 3	
Computer tablet button screen robot click picture game photo	sequence order predict solve choose follow create control organise classify	program input output technology digital instructions data	

LONG TERM OVERVIEW FOR RECEPTION

Curriculum Goal	Autumn (Milestone 1)	Spring (Milestone 2)	Summer (Milestone 3)
Primary link Make a movie	Children begin using a range of technology confidently and safely to capture photographs, record videos and create simple digital content linked to Wonderful Me and Once Upon a Wardrobe . They learn how to use tablets, interactive whiteboards and programmable toys, understand how to care for technology and begin following simple instructions and algorithms. They recognise that technology is used in everyday life and begin developing an awareness of online safety.	Through Lights, Sirens, Action! and Ready, Steady, Grow! , children use technology with increasing independence to record learning, create digital artwork, take photographs, make voice recordings and programme floor robots using simple sequences. They develop their understanding of algorithms, debugging and logical thinking while learning how to stay safe when using technology.	During Going Places and Time Travellers , children confidently select and use technology for different purposes. They create simple digital presentations, record videos, use programmable devices to solve simple problems and explain how technology helps people in everyday life. Children demonstrate increasing independence, resilience and responsibility when using digital devices, preparing them for the Year 1 Computing curriculum.
Supporting link Wow us with your writing	Children use technology to support mark making and early writing by creating digital pictures, typing simple words and recording their ideas using photographs and voice recordings.	Children use simple software to label pictures, create captions and record their ideas digitally, recognising that technology can be used to communicate information.	Children independently use technology to present ideas, record simple information and share their learning using text, images and audio.
Supporting link Shine like an artist	Children explore digital drawing, painting and photography using age-appropriate apps. They experiment with colour, shape and line while developing control of digital tools.	Children combine photographs, drawings and digital media to create simple pieces of artwork inspired by their learning across the curriculum.	Children confidently choose digital tools to create, edit and improve artwork, combining creativity with technology to communicate ideas.
Supporting link Plan a party	Children use technology to listen to music, explore sound and take photographs of celebrations and special events.	Children begin using digital devices collaboratively to organise ideas, record performances and celebrate achievements.	Children use technology to create invitations, take photographs, record videos and celebrate learning, understanding how digital media can be shared safely with others.
Vocabulary			
Tier 1	Tier 2	Tier 3	
computer, tablet, screen, keyboard, mouse, camera, photo, video, robot, button, click, app, game, internet, headphones, microphone, record, draw, type, printer	program, algorithm, sequence, instruction, predict, create, edit, save, open, close, search, explore, control, debug, solve, digital, technology, communicate	algorithm, programming, programmable, debugging, input, output, device, digital media, online safety, personal information, QR code, Bee-Bot	

LONG TERM OVERVIEW FOR COMPUTING

KEY: **AL** – Algorithms, **CS** – Computing systems, **CM** – Creating Media, **DI** – Data & Information, **DD** – Design & Development, **ET** – Effective use of tools, **NW** – Networks, **PG** – Programming, **SS** – Safety & Security, **IT** – Impact of Technology

Year 1	Autumn Term		Spring Term		Summer Term	
Topic	LAND OF HOPE AND GLORY		TO INFINITY AND BEYOND!		WHERE THE WILD THINGS ARE	
Term	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Unit	Technology around us.	Digital Painting	Moving a robot	Grouping data	Digital writing	Programming animations
Computing Strand	CS AL	ET CM	AL PG	DI AL	ET CM	PG DD
Knowledge	To identify technology To identify a computer and its main parts To use a mouse in different ways To use a keyboard to type on a computer To use the keyboard to edit text To create rules for using technology responsibly	To describe what different freehand tools do To use the shape tool and the line tools To make careful choices when painting a digital picture To explain why I chose the tools I used To use a computer on my own to paint a picture To compare painting a picture on a computer and on paper	To explain what a given command will do To act out a given word To combine forwards and backwards commands to make a sequence To combine four direction commands to make sequences To plan a simple program To find more than one solution to a problem	To label objects To identify that objects can be counted To describe objects in different ways To count objects with the same properties To compare groups of objects To answer questions about groups of objects	To use a computer to write To add and remove text on a computer To identify that the look of text can be changed on a computer To make careful choices when changing text To explain why I used the tools that I chose To compare typing on a computer to writing on paper	To choose a command for a given purpose To show that a series of commands can be joined together To identify the effect of changing a value To explain that each sprite has its own instructions To design the parts of a project To use my algorithm to create a program
National Curriculum Strand	Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	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 Use technology safely and respectfully, keeping personal information private; identify where to go for help and support	Use technology purposefully to create, organise, store, manipulate and retrieve digital content Use technology safely and respectfully, keeping personal information private; identify where to go for help and support	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

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	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 logical reasoning to predict the behaviour of simple programs Recognise common uses of information technology beyond school	when they have concerns about content or contact on the internet or other online technologies.	when they have concerns about content or contact on the internet or other online technologies.	Use logical reasoning to predict the behaviour of simple programs Use technology purposefully to create, organise, store, manipulate and retrieve digital content
Online Safety Focus	✓			✓	✓	
Suggested Trips / Enrichment	-Walks around the school buildings/ school grounds to identify different forms of technology -Walks around the local area to identify different forms of technology in our local community -PCSO visit to discuss elements of online safety					

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Year 2	Autumn Term		Spring Term		Summer Term	
Topic	FIRE, FIRE!		I HAVE A DREAM		GADGETS AND GIZMOS	
Term	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 4
Unit	Information technology around us	Digital Photography	Robot algorithms	Pictograms	Making music	Programming quizzes
Computing Strand	NW CS	ET CM	AL PG	DI ET	CM DD	PG DD
Knowledge	To recognise the uses and features of information technology To identify the uses of information technology in the school To identify information technology beyond school To explain how information technology helps us To explain how to use information technology safely To recognise that choices are made when using information technology	To use a digital device to take a photograph To make choices when taking a photograph To describe what makes a good photograph To decide how photographs can be improved To use tools to change an image To recognise that photos can be changed	To describe a series of instructions as a sequence To explain what happens when we change the order of instructions To use logical reasoning to predict the outcome of a program (series of commands) To explain that programming projects can have code and artwork To design an algorithm To create and debug a program that I have written	To recognise that we can count and compare objects using tally charts To recognise that objects can be represented as pictures To create a pictogram To select objects by attribute and make comparisons To recognise that people can be described by attributes To explain that we can present information using a computer	To say how music can make us feel To identify that there are patterns in music To show how music is made from a series of notes To show how music is made from a series of notes To create music for a purpose To review and refine our computer work	To explain that a sequence of commands has a start To explain that a sequence of commands has an outcome To create a program using a given design To change a given design To create a program using my own design To decide how my project can be improved
National Curriculum Strand	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by

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	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.	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.	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.		following precise and unambiguous instructions Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs
Online Safety Focus	✓	✓		✓		
Suggested Trips / Enrichment	-PCSO visit to discuss elements of online safety					

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Year 3	Autumn Term		Spring Term		Summer Term	
Topic	MEET THE FLINTSTONES		BY THE RIVERS OF BABYLON		IRON MAN	
Term	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Unit	Connecting computers	Stop-frame animation	Sequencing sounds	Branching databases	Desktop publishing	Events and actions in programs
Computing Strand	NW CS	ET CM	PG DD	DI ET	ET CM	PG DD
Knowledge	To explain how digital devices function To identify input and output devices To recognise how digital devices can change the way we work To explain how a computer network can be used to share information To explore how digital devices can be connected To recognise the physical components of a network	To explain that animation is a sequence of drawings or photographs To relate animated movement with a sequence of images To plan an animation To identify the need to work consistently and carefully To review and improve an animation To evaluate the impact of adding other media to an animation	To explore a new programming environment To identify that commands have an outcome To explain that a program has a start To recognise that a sequence of commands can have an order To change the appearance of my project To create a project from a task description	To create questions with yes/no answers To identify the object attributes needed to collect relevant data To create a branching database To explain why it is helpful for a database to be well structured To identify objects using a branching database To compare the information shown in a pictogram with a branching database	To recognise how text and images convey information To recognise that text and layout can be edited To choose appropriate page settings To add content to a desktop publishing publication To consider how different layouts can suit different purposes To consider the benefits of desktop publishing	To explain how a sprite moves in an existing project To create a program to move a sprite in four directions To adapt a program to a new context To develop my program by adding features To identify and fix bugs in a program To design and create a maze-based challenge
National Curriculum Strand	Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	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	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by	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	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems

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	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 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	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.	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 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	content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	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	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 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
Online Safety Focus		✓				
Suggested Trips / Enrichment	-PCSO visits to discuss elements of online safety -Enterprise Project					

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Year 4	Autumn Term		Spring Term		Summer Term	
Topic	THE EMPIRE STRIKES BACK!		GAME OF THRONES		ANY DREAM WILL DO	
Term	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Unit	The internet	Audio editing	Repetition in shapes	Data logging	Photo Editing	Repetition in games
Computing Strand	NW SS	ET CM	AL PG	CS DI	ET CM	PG DD
Knowledge	To describe how networks physically connect to other networks To recognise how networked devices make up the internet To outline how websites can be shared via the World Wide Web (WWW) To describe how content can be added and accessed on the World Wide Web (WWW) To recognise how the content of the WWW is created by people To evaluate the consequences of unreliable content	To identify that sound can be digitally recorded To use a digital device to record sound To explain that a digital recording is stored as a file To explain that audio can be changed through editing To show that different types of audio can be combined and played together To evaluate editing choices made	To identify that accuracy in programming is important To create a program in a text-based language To explain what 'repeat' means To modify a count-controlled loop to produce a given outcome To decompose a task into small steps To create a program that uses count-controlled loops to produce a given outcome	To explain that data gathered over time can be used to answer questions To use a digital device to collect data automatically To explain that a data logger collects 'data points' from sensors over time To use data collected over a long duration to find information To identify the data needed to answer questions To use collected data to answer questions	To explain that digital images can be changed To change the composition of an image To describe how images can be changed for different uses To make good choices when selecting different tools To recognise that not all images are real To evaluate how changes can improve an image	To develop the use of count-controlled loops in a different programming environment To explain that in programming there are infinite loops and count controlled loops To develop a design that includes two or more loops which run at the same time To modify an infinite loop in a given program To design a project that includes repetition To create a project that includes repetition
National Curriculum Strand	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Design, write and debug programs that accomplish specific goals, including controlling	Use sequence, selection, and repetition in programs; work with variables and various forms of input and output	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve

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Online Safety Focus	✓	✓			✓	
Suggested Trips / Enrichment	-PCSO visits to discuss elements of online safety -Enterprise Project					

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Year 5	Autumn Term		Spring Term		Summer Term	
Topic	OFF WITH THEIR HEADS!		EXPELLIARMUS!		THE HOUSE OF WISDOM	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit	Sharing information	Video Editing	Selection in physical computing	Flat-file databases	Vector drawing	Selection in quizzes
Computing Strand	NW ET	CM DD	PG CS	DI ET	ET CM	AL PG
Knowledge	To explain that computers can be connected together to form systems To recognise the role of computer systems in our lives To recognise how information is transferred over the internet To explain how sharing information online lets people in different places work together To contribute to a shared project online To evaluate different ways of working together online	To explain what makes a video effective To identify digital devices that can record video To capture video using a range of techniques To create a storyboard To identify that video can be improved through reshooting and editing To consider the impact of the choices made when making and sharing a video	To control a simple circuit connected to a computer To write a program that includes count-controlled loops To explain that a loop can stop when a condition is met To explain that a loop can be used to repeatedly check whether a condition has been met To design a physical project that includes selection To create a program that controls a physical computing project	To use a form to record information To compare paper and computer-based databases To outline how grouping and then sorting data allows us to answer questions To explain that tools can be used to select specific data To explain that computer programs can be used to compare data visually To apply my knowledge of a database to ask and answer real-world questions	To identify that drawing tools can be used to produce different outcomes To create a vector drawing by combining shapes To use tools to achieve a desired effect To recognise that vector drawings consist of layers To group objects to make them easier to work with To evaluate my vector drawing	To explain how selection is used in computer programs To relate that a conditional statement connects a condition to an outcome To explain how selection directs the flow of a program To design a program which uses selection To create a program which uses selection To evaluate my program
National Curriculum Strand	Design, write and debug programs that accomplish specific goals, including controlling	Use search technologies effectively, appreciate how results are selected and ranked, and be	Design, write and debug programs that accomplish specific goals, including controlling	Use search technologies effectively, appreciate how results are selected and ranked, and be	Select, use and combine a variety of software (including internet services) on a range of digital devices to design	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve

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	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 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 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.	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.	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 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	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	and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	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 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
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Online Safety Focus	✓	✓				
Suggested Trips / Enrichment	-PCSO visits to discuss elements of online safety -Enterprise Project					

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Year 6	Autumn Term		Spring Term		Summer Term	
Topic	VICTORY IS OURS!		GREAT EXPECTATIONS		TROY STORY	
Term	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
Unit	Internet communication	Webpage creation	Variables in gaming	Introduction to spreadsheets	3D modelling	Sensing
Computing Strand	NW ET	CM DD	PG DD	ET DI	ET CM	PG CS
Knowledge National Curriculum Strand	To identify how to use a search engine To describe how search engines select results To explain how search results are ranked To recognise why the order of results is important, and to whom To recognise how we communicate using technology To evaluate different methods of online communication	To review an existing website and consider its structure To plan the features of a web page To consider the ownership and use of images (copyright) To recognise the need to preview pages To outline the need for a navigation path To recognise the implications of linking to content owned by other people	To define a 'variable' as something that is changeable To explain why a variable is used in a program To choose how to improve a game by using variables To design a project that builds on a given example To use my design to create a project To evaluate my project	To identify questions which can be answered using data To explain that objects can be described using data To explain that formulas can be used to produce calculated data To apply formulas to data, including duplicating To create a spreadsheet to plan an event To choose suitable ways to present data	To use a computer to create and manipulate three-dimensional (3D) digital objects To compare working digitally with 2D and 3D graphics To construct a digital 3D model of a physical object To identify that physical objects can be broken down into a collection of 3D shapes To design a digital model by combining 3D objects To develop and improve a digital 3D model	To create a program to run on a controllable device To explain that selection can control the flow of a program To update a variable with a user input To use an conditional statement to compare a variable to a value To design a project that uses inputs and outputs on a controllable device To develop a program to use inputs and outputs on a controllable device

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Computing Strand	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 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.	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.	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 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 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 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.	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 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
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LONG TERM OVERVIEW FOR COMPUTING

KEY: AL – Algorithms, CS – Computing systems, CM – Creating Media, DI – Data & Information, DD – Design & Development, ET – Effective use of tools, NW – Networks,
PG – Programming, SS – Safety & Security, IT – Impact of Technology

Knowledge	✓	✓			✓	
Suggested Trips / Enrichment	-PCSO visits to discuss elements of online safety -Enterprise Project					