



Emmanuel Holcombe C of E Primary School
Computing Curriculum
2020

Statement of Intent

At Emmanuel Holcombe Primary School, we understand the immense value that technology plays not only in supporting the Computing and whole school curriculum but overall in the day-to-day life of our school. Our aims are to fulfil the requirements of the National Curriculum for Computing whilst also providing enhanced collaborative learning opportunities, engagement in rich content and supporting pupil's conceptual understanding of new concepts which support the needs of all our pupils.

“A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world...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.” - National Curriculum

Our Computing curriculum aims to develop the heart and mind of every child. Our aim is to provide a broad and balanced curriculum whilst ensuring that pupils become digitally literate and digitally resilient. Technology is ever evolving, and we aim to develop pupils who can use and express themselves, develop their ideas through information and communication technology at a suitable level for the future workplace and as active participants in a digital world.

The aims of our Computing curriculum are to develop pupils who:

- Are responsible, competent, confident and creative users of information and communication technology.
- Know how to keep themselves safe whilst using technology and on the internet and be able to minimise risk to themselves and others.
- Become responsible, respectful and competent users of data, information and communication technology.
- Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.
- Can analyse problems in computational terms, and have repeated practical experience writing computer programs in order to solve such problems.
- Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation.
- Become digitally literate and are active participants in a digital world.
- Are equipped with the capability to use technology throughout their lives.
- Understand the importance of governance and legislation regarding how information is used, stored, created, retrieved, shared and manipulated.

- Have a 'can do' attitude when engaging with technology and its associated resources.
- Utilise computational thinking beyond the Computing curriculum.
- Understand and follow the SMART E-Safety rules.
- Understand the E-Safety messages can keep them safe online.
- Know who to contact if they have concerns.
- Apply their learning in a range of contexts, e.g. at school and at home.

Implementation

To ensure high standards of teaching and learning in computing, we implement a curriculum that is progressive throughout the whole school. Our implementation of the computing curriculum is in line with 2014 Primary National Curriculum requirements for KS1 and KS2 and the Foundation Stage Curriculum in England. This provides a broad framework and outlines the knowledge and skills taught in each key stage.

Computing teaching will deliver these requirements through our half-termly units. Our Computing progression model is broken down into three strands that make up the computing curriculum. These are Computer Science, Information Technology and Digital Literacy. Computer Science underlines the knowledge and skills relating to programming, coding, algorithms and computational thinking. Information Technology underlines the knowledge and skills relating to communication, multimedia and data representation and handling. Digital Literacy underlines the knowledge and skills relating to online safety and technology uses all of which are covered whether combined or discreetly.

We use and follow the Purple Mash scheme of work from Year 1-6, ensuring consistency and progression throughout the school.

We recognise that computing is a specialist subject and not all teachers are computing specialists. Computing lessons are taught by our teaching staff with additional support from our member of staff in charge of IT Support. The Purple Mash scheme of work enables clear coverage of the computing curriculum whilst also providing support and CPD for less confident teachers to deliver lessons.

Lessons are broken down into weekly units, usually with two units taught per half-term. Units are practical and engaging and allow computing lessons to be hands on. Units cover a broad range of computing components such as coding, spreadsheets, Internet and Email, Databases, Communication networks, touch typing, animation and online safety.

When teaching computing teachers can follow the children's interests to ensure their learning is engaging, broad and balanced. Teachers should ensure that ICT and computing capability is also achieved through core and foundation subjects and where appropriate and necessary ICT and computing should be incorporated into work for all subjects using our wide range of interactive ICT resources.

Through our Purple Mash subscription our teachers can deliver thematic, cross curricular lessons that also follow children's interests and provide flexibility. Purple Mash has an online portal of age-appropriate software, games and activities as well as topic materials and materials to support children's learning in other subject areas for all key stages.

Computing lessons will also use the Purple Mash software to 'make music' using the 2Sequence program, design and make using the 2Animate software and make links with maths through spreadsheets using 2Calculate.

Computing teaching is practical and engaging and a variety of teaching approaches and activities are provided based on teacher judgement and pupil ability. We have a wide range of resources to support our computing teaching. Pupils may use laptops or iPads independently, in pairs, alongside a IT support or in a group with the teacher. Teachers and pupils are also aware of the importance of health and safety and pupils are always supervised when using technology and accessing the internet.

Our pupils are fully encouraged to engage with ICT and technology outside of school. Each teacher and pupil at has their own unique Purple Mash login and password. Computing work can be stored and saved using pupil log in details and homework or '2do's' can also be set for pupils to access and complete tasks at home that link with their current class learning.

We provide a variety of opportunities for computing learning inside and outside the classroom. Computing and safeguarding go hand in hand and we provide a huge focus on internet safety inside and outside of the classroom. Additional to all pupils studying an online safety unit through their computing lessons, every year we also take part in National Safer Internet Day in February. The Computing co-ordinator alongside class teachers will plan additional internet safety lessons and activities to take part in following a specific yearly theme. Internet Safety assemblies are also held as well as parent internet safety workshops and parent home activities.

Impact:

Our Computing Curriculum is high quality, well thought out and is planned to demonstrate progression and build on and embed current skills. We focus on progression of knowledge and skills in the different computational components and alike other subjects discreet vocabulary progression also form part of the units of work.

If children are keeping up with the curriculum, they are deemed to be making good or better progress.

We measure the impact of our curriculum through the following methods:

- Pupil discussions and interviewing the pupils about their learning (pupil voice).
- Monitoring with our subject computing lead visits.
- Opportunities for dialogue between teachers.
- Photo evidence and images of the pupils practical learning.
- Video analysis through recording of performance in lessons.
- A reflection on standards achieved against the planned outcomes.
- Learning walks and reflective staff feedback (teacher voice).
- Dedicated Computing leader time.
- Monitoring of children's work.

Computing in the Early Years Foundation Stage

In Reception, children are given the opportunity to explore a range of technology through child-initiated play and direct teaching time.

	Computer Science		Information Technology				Digital Literacy	
Relevant Early Learning Goals	<p>ELG 02 Understanding: children follow instructions involving several ideas or actions. They answer 'how' and 'why' questions about their experiences and in response to stories or events.</p>	<p>ELG 04 Moving and handling: children show good control and coordination in large and small movements. They move confidently in a range of ways, safely negotiating space.</p>	<p>ELG 13 People and communities: children talk about past and present events in their own lives and in the lives of family members. They know that other children don't always enjoy the same things, and are sensitive to this. They know about similarities and differences between themselves and others, and among families, communities and traditions.</p>	<p>ELG 15 Technology: Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</p>	<p>ELG 16 Exploring and using media and materials: children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p>	<p>ELG 17 Being imaginative: children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role-play and stories.</p>	<p>ELG 06 Self-confidence and self-awareness: children are confident to try new activities, and say why they like some activities more than others. They are confident to speak in a familiar group, will talk about their ideas, and will choose the resources they need for their chosen activities. They say when they do or don't need help.</p>	<p>ELG 07 Managing feelings and behaviour: children talk about how they and others show feelings, talk about their own and others' behaviour, and its consequences, and know that some behaviour is unacceptable. They work as part of a group or class, and understand and follow the rules. They adjust their behaviour to different situations, and take changes of routine in their stride.</p>
Skills	<ul style="list-style-type: none"> • I know that some devices need instructions to work. • I know that instructions need to be given in the correct order. • I can follow a sequence of instructions in the correct order. • I can recognise when I haven't followed the instructions correctly. • I can give accurate instructions for others to follow. • I can fiddle and play with the Bee-Bot to discover what it can do. • I can program the Bee-bot to follow a given set of instructions. • I can program a Bee-Bot to move from one place to another. • I can sequence events in the correct order. • I can recognise where the mistake is in a sequence. 	<p>I can use a mouse to navigate around a screen and select options.</p> <ul style="list-style-type: none"> • When following a set of instructions (e.g. being a robot and moving around the room or making a sandwich) I do so safely with good control and coordination. 	<p>I can talk about what technology I like to use.</p> <ul style="list-style-type: none"> • I know that other people don't always like to use technology in the same way that I do. • I can talk about how my family and I use technology at home at school and/or work. 	<p>I can recognise and name different types of technology.</p> <ul style="list-style-type: none"> • I can recognise and name different types of technology. • I can log on and off from a laptop or iPad correctly. • I can print my work. • I can talk about how devices can record both still and moving images. 	<ul style="list-style-type: none"> • I can explore my environment using multimedia equipment. • I can use multimedia equipment, such as digital and video cameras, microscopes, webcams and visualisers, to capture still and moving images. • I can play back my captured recordings. 	<p>I can explore making and listening to sounds using simple programs, apps and devices.</p> <ul style="list-style-type: none"> • I can represent my own ideas using simple art programs, apps and devices. 	<ul style="list-style-type: none"> • I know who to go to for help when I am using the iPads/laptops. • I know that you can use computers to find information and to create exciting things. • I know that computers are not just for games. • I know that computers can help me to learn. • I know how to log into Purple Mash with my username and password. 	<p>I know that some information should be kept private and not shared with people I don't know.</p> <ul style="list-style-type: none"> • I know the rules when using iPads/laptops and technology in my school. • I know that I must follow the rules when using the internet to keep myself safe.

Computing Progression

N.C. Statements KS1 Year 1



	Computer Science			Information Technology	Digital Literacy	
Statement	<p>Understand what algorithms are: how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</p>	<p>Create and debug simple programs.</p>	<p>Use logical reasoning to predict the behaviour of simple programs.</p>	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p>	<p>Recognise common uses of information technology beyond school.</p>	<p>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.</p>
Outcome	<p>Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective. They know that an algorithm written for a computer is called a program.</p>	<p>Children can work out what is wrong with a simple algorithm when the steps are out of order, e.g. The Wrong Sandwich in Purple Mash and can write their own simple algorithm, e.g. Colouring in a Bird activity. Children know that an unexpected outcome is due to the code they have created and can make logical attempts to fix the code, e.g. Bubbles activity in 2Code.</p>	<p>When looking at a program, children can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program. Children can, for example, interpret where the turtle in 2Go challenges will end up at the end of the program.</p>	<p>Children are able to sort, collate, edit and store simple digital content e.g. children can name, save and retrieve their work and follow simple instructions to access online resources, use Purple Mash 2Quiz example (sorting shapes), 2Code design mode (manipulating backgrounds) or using pictogram software such as 2Count.</p>	<p>Children understand what is meant by technology and can identify a variety of examples both in and out of school. They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs. a chair.</p>	<p>Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons. Children take ownership of their work and save this in their own private space such as their My Work folder on Purple Mash.</p>

Computing Progression

N.C. Statements KS1 Year 2



	Computer Science			Information Technology	Digital Literacy	
Statement	<p>Understand what algorithms are: how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</p>	<p>Create and debug simple programs.</p>	<p>Use logical reasoning to predict the behaviour of simple programs.</p>	<p>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</p>	<p>Recognise common uses of information technology beyond school.</p>	<p>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.</p>
Outcome	<p>Children can explain that an algorithm is a set of instructions to complete a task. When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code.</p>	<p>Children can create a simple program that achieves a specific purpose. They can also identify and correct some errors, e.g. Debug Challenges: Chimp. Children's program designs display a growing awareness of the need for logical, programmable steps.</p>	<p>Children can identify the parts of a program that respond to specific events and initiate specific actions. For example, they can write a cause and effect sentence of what will happen in a program.</p>	<p>Children demonstrate an ability to organise data using, for example, a database such as 2Investigate and can retrieve specific data for conducting simple searches. Children are able to edit more complex digital data such as music compositions within 2Sequence. Children are confident when creating, naming, saving and retrieving content. Children use a range of media in their digital content including photos, text and sound.</p>	<p>Children can effectively retrieve relevant, purposeful digital content using a search engine. They can apply their learning of effective searching beyond the classroom. They can share this knowledge, e.g. 2Publish example template. Children make links between technology they see around them, coding and multimedia work they do in school e.g. animations, interactive code and programs.</p>	<p>Children know the implications of inappropriate online searches. Children begin to understand how things are shared electronically such as posting work to the Purple Mash display board. They develop an understanding of using email safely by using 2Respond activities on Purple Mash and know ways of reporting inappropriate behaviours and content to a trusted adult.</p>

Computing Progression

N.C. Statements KS2 Year 3



	Computer Science				Information Technology		Digital Literacy
Statement	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 concern about content and contact.
Outcome	Children can turn a simple real-life situation into an algorithm for a program by deconstructing it into manageable parts. Their design shows that they are thinking of the desired task and how this translates into code. Children can identify an error within their program that prevents it following the desired algorithm and then fix it.	Children demonstrate the ability to design and code a program that follows a simple sequence. They experiment with timers to achieve repetition effects in their programs. Children are beginning to understand the difference in the effect of using a timer command rather than a repeat command when creating repetition effects. Children understand how variables can be used to store information while a program is executing.	Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables. They make good attempts to 'step through' more complex code in order to identify errors in algorithms and can correct this. e.g. traffic light algorithm in 2Code . In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.	Children can list a range of ways that the internet can be used to provide different methods of communication. They can use some of these methods of communication, e.g. being able to open, respond to and attach files to emails using 2Email . They can describe appropriate email conventions when communicating in this way.	Children can carry out simple searches to retrieve digital content. They understand that to do this, they are connecting to the internet and using a search engine such as Purple Mash search or internet-wide search engines.	Children can collect, analyse, evaluate and present data and information using a selection of software, e.g. using a branching database (2Question), using software such as 2Graph . Children can consider what software is most appropriate for a given task. They can create purposeful content to attach to emails, e.g. 2Respond .	Children demonstrate the importance of having a secure password and not sharing this with anyone else. Furthermore, children can explain the negative implications of failure to keep passwords safe and secure. They understand the importance of staying safe and the importance of their conduct when using familiar communication tools such as 2Email in Purple Mash. They know more than one way to report unacceptable content and contact.

Computing Progression

N.C. Statements KS2 Year 4



	Computer Science				Information Technology		Digital Literacy
Statement	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 concern about content and contact.
Outcome	When turning a real-life situation into an algorithm, the children's design shows that they are thinking of the required task and how to accomplish this in code using coding structures for selection and repetition. Children make more intuitive attempts to debug their own programs.	Children's use of timers to achieve repetition effects are becoming more logical and are integrated into their program designs. They understand 'if statements' for selection and attempt to combine these with other coding structures including variables to achieve the effects that they design in their programs. As well as understanding how variables can be used to store information while a program is executing, they are able to use and manipulate the value of variables. Children can make use of user inputs and outputs such as 'print to screen'. e.g. 2Code .	Children's designs for their programs show that they are thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables. They can trace code and use step-through methods to identify errors in code and make logical attempts to correct this. e.g. traffic light algorithm in 2Code . In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.	Children recognise the main component parts of hardware which allow computers to join and form a network. Their ability to understand the online safety implications associated with the ways the internet can be used to provide different methods of communication is improving.	Children understand the function, features and layout of a search engine. They can appraise selected webpages for credibility and information at a basic level.	Children are able to make improvements to digital solutions based on feedback. Children make informed software choices when presenting information and data. They create linked content using a range of software such as 2Connect and 2Publish+ . Children share digital content within their community, i.e. using Virtual Display Boards .	Children can explore key concepts relating to online safety using concept mapping such as 2Connect . They can help others to understand the importance of online safety. Children know a range of ways of reporting inappropriate content and contact.

Computing Progression

N.C. Statements KS2 Year 5



	Computer Science				Information Technology		Digital Literacy
Statement	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 concern about content and contact.
Outcome	Children may attempt to turn more complex real-life situations into algorithms for a program by deconstructing it into manageable parts. Children are able to test and debug their programs as they go and can use logical methods to identify the approximate cause of any bug but may need some support identifying the specific line of <u>code</u> .	Children can translate algorithms that include sequence, selection and repetition into code with increasing ease and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures. They are combining sequence, selection and repetition with other coding structures to achieve their <u>algorithm design</u> .	When children code, they are beginning to think about their code structure in terms of the ability to debug and interpret the code later, e.g. the use of tabs to organise code and the <u>naming of variables</u> .	Children understand the value of computer networks but are also aware of the main dangers. They recognise what personal information is and can explain how this can be kept safe. Children can select the most appropriate form of online communications contingent on audience and digital content, e.g. <u>2Blog</u> , <u>2Email</u> , <u>Display Boards</u> .	Children search with greater complexity for digital content when using a search engine. They are able to explain in some detail how credible a webpage is and the information it contains.	Children are able to make appropriate improvements to digital solutions based on feedback received and can confidently comment on the success of the solution. e.g. creating their own program to meet a design brief using <u>2Code</u> . They objectively review solutions from others. Children are able to collaboratively create content and solutions using digital features within software such as collaborative mode. They are able to use several ways of sharing digital content, i.e. <u>2Blog</u> , <u>Display Boards</u> and <u>2Email</u> .	Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and <u>online services</u> . Children implicitly relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others.

Computing Progression

N.C. Statements KS2 Year 6



	Computer Science				Information Technology		Digital Literacy
Statement	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 concern about content and contact.
Outcome	Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task (abstraction) and then decomposing them in a logical way using their knowledge of possible coding structures and applying skills from previous programs. Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a <u>problem</u> .	Children translate algorithms that include sequence, selection and repetition into code and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures, including nesting structures within each other. Coding displays an improving understanding of variables in coding, outputs such as sound and movement, inputs from the user of the program such as button clicks and the <u>value of functions</u> .	Children are able to interpret a program in parts and can make logical attempts to put the separate parts of a complex algorithm together to explain the <u>program as a whole</u> .	Children understand and can explain in some depth the difference between the internet and the World Wide Web. Children know what a WAN and LAN are and can describe how they access the <u>internet in school</u> .	Children readily apply filters when searching for digital content. They are able to explain in detail how credible a webpage is and the information it contains. They compare a range of digital content sources and are able to rate them in terms of content quality and accuracy. Children use critical thinking skills in everyday use of online communication.	Children make clear connections to the audience when designing and creating digital content. The children design and create their own blogs to become a content creator on the internet, e.g. <u>2Blog</u> . They are able to use criteria to evaluate the quality of digital solutions and are able to identify improvements, making some refinements.	Children demonstrate the safe and respectful use of a range of different technologies and online services. They identify more discreet inappropriate behaviours through developing critical thinking, e.g. <u>2Respond</u> activities. They recognise the value in preserving their privacy when online for their own and other people's safety.

Year group unit overview

Theme Key:															
	Coding and Computational thinking		Spreadsheets		Internet and Email		Art and Design		Music		Databases and graphing		Writing and Presenting		Communication and networks

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
YEAR 1	Unit 1.1 Online Safety & Exploring Purple Mash Weeks – 4 Programs – Various				Unit 1.2 Grouping & Sorting Weeks – 2 Programs – 2DIY		Unit 1.3 Pictograms Weeks – 3 Programs – 2Count		Unit 1.4 Lego Builders Weeks – 3 Programs – 2DIY		Unit 1.5 Maze Explorers Weeks – 3 Programs – 2Go		Unit 1.6 Animated Story Books Weeks – 5 Programs – 2Create A Story			Unit 1.7 Coding Weeks – 6 Programs – 2Code				Unit 1.8 Spreadsheets Weeks – 3 Programs – 2Calculate		Unit 1.9 Technology outside school Weeks – 2 Programs – Various									

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
YEAR 2	Unit 2.1 Coding Weeks – 5 Programs – 2Code					Unit 2.2 Online Safety Weeks – 3 Programs – Various		Unit 2.3 Spreadsheets Weeks – 4 Programs – 2Calculate			Unit 2.4 Questioning Weeks – 5 Programs – 2Question, 2Investigate				Unit 2.5 Effective Searching Weeks – 3 Programs – Browser		Unit 2.6 Creating Pictures Weeks – 5 Programs – 2PaintAPicture			Unit 2.7 Making Music Weeks – 3 Programs – 2Sequence		Unit 2.8 Presenting Ideas Weeks – 4 Programs – Various										

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
YEAR 3	Unit 3.1 Coding						Unit 3.2 Online safety			Unit 3.3 Spreadsheets			Unit 3.4 Touch Typing			Unit 3.5 Email (including email safety)						Unit 3.6 Branching Databases			Unit 3.7 Simulations			Unit 3.8 Graphing					
	Number of Weeks – 6						Weeks – 3			Weeks – 3			Weeks – 4			Weeks – 6						Weeks – 4			Weeks – 3			Weeks – 3					
	Main Programs – 2Code						Programs – Various			Programs – 2Calculate			Programs – 2Type			Programs – 2Email, 2Connect, 2DIY						Programs – 2Question			Programs – 2Simulate, 2Publish			Programs – 2Graph					
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
YEAR 4	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 Effective Search		Unit 4.8 Hardware Investigators							
	Number of Weeks – 6						Weeks – 4			Weeks – 6						Weeks – 5			Weeks – 4			Weeks – 3		Weeks – 3		Weeks – 2							
	Main Programs – 2Code						Programs – Various			Programs – 2Calculate						Programs – 2Email, 2Connect, 2DIY			Programs – Logo			Programs – 2Animate		Programs – Browser									
Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
YEAR 5	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								
	Number of Weeks – 6						Weeks – 3			Weeks – 6						Weeks – 4			Weeks – 5			Weeks – 4			Weeks – 4								
	Main Programs – 2Code						Programs – Various			Programs – 2Calculate						Programs – 2Question, 2Investigate			Programs – 2DIY 3D			Programs – 2Design and Make			Programs – 2Connect								

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
YEAR 6*	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						
	Number of Weeks – 6						Weeks – 2			Weeks – 5					Weeks – 5				Weeks – 5				Weeks – 3			Weeks – 6						
	Main Programs – 2Code						Programs - Various			Programs – 2Calculate					Programs – 2Blog				Programs – 2Code, 2Connect							Programs – 2Quiz, 2DIY, Text Toolkit, 2Investigate						

Assessment and Evidence

Within EYFS, children’s assessment is formative by reviewing evidence gathered from continuous provision and making holistic judgement of the Early Learning Goals. Photos are used to evidence this in Tapestry or Seesaw. In key stage 1 and Key stage 2, Pupil attainment is assessed using the 2Simple Computing Assessment Tool for Years 1 to 6. The tool enables staff to accurately identify attainment of pupils through the detailed exemplification it has for each key learning intention. Teachers keep accurate records of pupil attainment by entering data using the 2Simple Computing Assessment Tool. Evidence of children’s work is saved in their Purple Mash folder online and evidence including photos and explanations are saved in Seesaw.