Pott Shrigley Church School
Computing Long Term Plan

Aims

The national curriculum for computing aims to ensure that all pupils:

♣ Can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms, and data representation.

♣ Can analyse problems in computational terms and have repeated practical experience of writing computer programs in order to solve such problems.

♣ Can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems.

♣ Are responsible, competent, confident, and creative users of information and communication technology.

Attainment targets

By the end of each key stage, pupils are expected to know, apply, and understand the matters, skills and processes specified in the relevant programme of study. Schools are not required by law to teach the example content in [square brackets].

Key stage 1

Pupils should be taught to:

♣Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
♣ Create and debug simple programs.
♣ Use logical reasoning to predict the behaviour of simple programs.
♣ Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
♣ Recognise common uses of information technology beyond school.
♣ Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

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Key stage 2

Pupils should be taught to:

♣ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

♣ Use sequence, selection, and repetition in programs, work with variables and various forms of input and output.

♣ Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

♣ Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.

♣ Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

♣ Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.

♣ Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

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Cycle A

EYFS/Y1					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Project Evolve Online Safety – Online Relationships and Privacy	**Mini Mash 2Design and Make Express Arts – Creating with Materials**	**Purple Mash Pictograms 1.3**	**Mini Mash 2Beat Communication and Language – Listening, Attention and Understanding**	**Purple Mash Lego Builders 1.4**	**Mini Mash 2Connect Understanding the World – The Natural World**
Key learning objectives ● To learn how the internet is used to communicate. ● To understand how I might use the internet in school and at home. ● To understand to ask permission to use technology and the internet. ● To understand to be kind to people online. ● To understand not to post things online without permission. ● To understand what age restrictions are and why we have them.	**Key learning objectives** ● To understand how to login to Purple Mash. ● To understand what a username and password are. ● To know where to find programmes on Purple Mash and Mini Mash. ● To find 2Design and Make and follow instructions to create a 3D model. ● To change the colour and design of the 3D model using the appropriate tools.	**Key learning objectives** ● To understand what a pictogram is. ● To understand what data is. ● To gather simple information and facts using 2Count. ● To look at what is the same and what is different about the information and facts. ● To present data in a pictogram using 2Connect. ● To add and delete objects in the pictogram.	**Key learning objectives** ● To login to Purple Mash and find 2Beat. ● To explore the different instruments on 2Beat. ● To listen to the different instruments on 2Beat and talk about what they can hear. ● To use 2Beat to create simple rhythms. ● To make some of the sounds loud and some of the sounds quiet and talk about them to their peers.	**Key learning objectives** ● To understand that computers work by following instructions. ● To understand that an algorithm is a set of instructions that a computer follows. ● To understand that computers can go wrong if the instructions are not correct. ● To understand that we can debug a computer to fix a problem. ● To use 2Paint to follow instructions and understand the	**Key learning objectives** ● To login to Purple Mash and find 2Connect. ● To understand that we can use 2Connect to create mind maps. ● To create a simple mind map about the seven continents. ● To give the mind map a title and give the title a colour. ● To learn what a node is and how to create one to add concepts to the mind map. ● To learn how to print and save their mind maps.

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● To begin to learn key vocabulary relating to online safety.	● To save work in Purple Mash. ● To begin to learn simple vocabulary relating to ICT.	● To learn key vocabulary relating to pictograms.	● To make a beat to go with a well-known story. ● To learn and use key vocabulary.	importance of following them step by step. ● To learn and use key vocabulary relating to algorithms.	● To learn and apply key vocabulary.
Curriculum objectives ***EYFS –*** *Communication and Language* *Understanding the World* ***KS1*** *- 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.*	**Curriculum objectives** ***EYFS*** *– Expressive Arts and Design* **KS1** *- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.*	**Curriculum objectives** ***EYFS –*** *Mathematics* ***KS1 -*** *Use technology purposefully to create, organise, store, manipulate and retrieve digital content.*	**Curriculum objectives** ***EYFS*** *– Communication and Language* *Expressive Arts and Design* ***KS1 -*** *Use technology purposefully to create, organise, store, manipulate and retrieve digital content.*	**Curriculum objectives** ***EYFS*** *– Communication and Language* *Mathematics* ***KS1*** *- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.* *Create and debug simple programs.* *Use logical reasoning to predict the behaviour of simple programs.*	**Curriculum objectives** ***EYFS*** *– Understanding the World* **KS1** *- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.*

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Cycle B

EYFS/Y1					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Purple Mash Online Safety 1.1	**Purple Mash Grouping and Sorting 1.2**	**Purple Mash Maze Explorers 1.5**	**Purple Mash Animated Stories 1.6**	**Purple Mash Coding 1.7**	**Mini Mash Outdoor Scene**
Key learning objectives ● To login safely and understand why it is important to do so. ● To understand where to save work so that it is kept private. ● To understand not to share passwords or personal information online. ● To find messages from the teacher and understand when it safe to open messages and when it was not.	**Key learning objectives** ● To understand vocabulary relating to the unit. ● To understand how to find a 'To Do' task and complete it. ● To describe and sort shapes. ● To complete and save work to the appropriate place. ● To log off safely to protect privacy.	**Key learning objectives** ● To login in safely to Purple Mash and find 2Go. ● To learn how to use the direction arrows in 2Go to move forwards, backwards, left, and right. ● To learn how to undo their last move. ● To learn how to move diagonally. ● To create an algorithm.	**Key learning objectives** ● To understand the difference between animated traditional books and e-books. ● To explore 2Create a Story and understand the different tools. ● To learn appropriate vocabulary relating to the program. ● To add animation to a picture. ● To add sound effects, a voice recording, and music to the book.	**Key learning objectives** ● To recall what instructions are. ● To recall what an algorithm is. ● To create a simple program on 2Code using code blocks. ● To use event, object, and action code blocks. ● To begin to understand how code executes when a program is run. ● To learn how to edit a scene by adding, deleting, and moving objects. ● To learn how to change the size of objects.	**Key learning objectives** ● To learn how to go to the outdoor scene on Mini Mash and complete different activities. • To create a character in the outdoor role play area by taking a picture with the iPad and then writing a speech bubble for the character. • To learn how to save work to a folder. •To use 2Paint a Picture in the painting area to create a background scene for your character. • To use 2Beat in the music area to compose a simple beat to

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			● To learn how to change the font style and size.		accompany their created character. • To share their creations with their peers and talk about what they have done using basic ICT vocabulary.
Curriculum objectives ***EYFS –*** *Communication and Language* *Understanding the World* ***KS1 -*** *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.*	**Curriculum objectives** ***EYFS*** *– Communication and Language* *Mathematics* ***KS1 -*** *Use technology purposefully to create, organise, store, manipulate and retrieve digital content.*	**Curriculum objectives** ***EYFS*** *– Communication and Language* *Mathematics* **KS1** *- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.* *Create and debug simple programs.* *Use logical reasoning to predict the behaviour of simple programs.*	**Curriculum objectives** ***EYFS*** *– Communication and Language* *Literacy* ***KS1 -*** *Use technology purposefully to create, organise, store, manipulate and retrieve digital content.* *Recognise common uses of information technology beyond school.*	**Curriculum objectives** ***EYFS*** *– Communication and Language* *Mathematics* ***KS1 -*** *Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.* *Create and debug simple programs.* *Use logical reasoning to predict the behaviour of simple programs.*	**Curriculum objectives** ***EYFS –*** *Communication and Language* *Understanding the World* *Expressive Arts and Design* **KS1 -** *Use technology purposefully to create, organise, store, manipulate and retrieve digital content.*

				Use technology purposefully to create, organise, store, manipulate and retrieve digital content	

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Cycle A

Year 2/3					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Purple Mash Online Safety 2.2	**Purple Mash Coding 2.1**	**Purple Mash Spreadsheets 2.3**	**Purple Mash Touch Typing 3.4**	**Purple Mash Effective Searching 2.5**	**Purple Mash Presenting Ideas 2.8**
Key learning objectives • To build on prior learning and understand when and how we use the internet. • To learn how to refine searches using the search tool. • To learn not to click on anything that we do not know, and the risks involved in doing this. • To understand how things that we post can be shared and leave a digital footprint or trail. • To share work on Purple Mash to communicate with others. • To understand how to communicate with others online and the safe way to do this.	**Key learning objectives** • To build on prior knowledge and understand what an algorithm is. • To create a computer program using an algorithm. • To create a program using a given design. • To understand that an algorithm follows a sequence. • To design an algorithm that follows a timed sequence. • To understand that different objects have different properties. • To understand functions of buttons in a program.	**Key learning objectives** • To understand what a spreadsheet is and what we can use them for. • To use 2Calculate to create a spreadsheet. • To use a spreadsheet for money calculations. • To learn what the image, lock, move cell, speak, and count tools do. • To make a counting machine using these tools. • To use the totalling tools. • To use the 2Calculate tools to check calculations.	**Key learning objectives** • To learn what touch typing is and when it is used. • To learn what a keyboard is called and why. • To understand and learn what the correct posture to adopt is when touch typing. • To learn what each of the three rows on a keyboard are called. • To learn what the starting position is when touch typing. • To practise typing with the left hand and the right hand and understand what keys each hand touches.	**Key learning objectives** • To understand key vocabulary associated with searching on the internet. • To deepen understanding of searching on the internet. • To understand and use Kiddle to search safely on the internet. • To understand that in school we would search for information, images, videos, and maps to support our learning. • To create a leaflet using the search features to gather information on a topic.	**Key learning objectives** • To understand how we can use ICT to present ideas. • To understand how we are going to present a story in different ways. • To build on prior knowledge and use 2Connect to create a mind map for their story. • To use 2Quiz to create a quiz about their chosen story. • To create a fact file on a non-fiction topic that we are learning about. • To make a presentation to the class using 2Publish.

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	• To understand and debug simple programs.	To use 2 Calculate to collect data and produce a graph.			
Curriculum objectives ***KS1*** *- 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 technology beyond school.* ***KS2 -*** *use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*	**Curriculum objectives** ***KS1*** *- Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.* *Create and debug simple programs.* *Use logical reasoning to predict the behaviour of simple programs.* ***KS2*** *- use sequence, selection, and repetition in programs, work with variables and various forms of input and output.* *Use logical reasoning to explain how some*	**Curriculum objectives** ***KS1*** *- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.* *Recognise common uses of information technology beyond school.* ***KS2*** *- 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 content*	**Curriculum objectives** **KS1 -** *Use technology purposefully to create, organise, store, manipulate and retrieve digital content* *Recognise Common uses of technology beyond school.* **KS2 -** U*se sequence, selection, and repetition in programs, work with variables and various forms of input and output.*	**Curriculum objectives** ***KS1*** *- 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 when they have concerns about content or contact on the internet or other online technologies.* ***KS2*** *- Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for*	**Curriculum objectives** ***KS1*** *- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.* ***KS2*** *- 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.*

	simple algorithms work and to detect and correct errors in algorithms and programs.	*that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.*		*communication and collaboration.* *Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.*	

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Cycle B

Year 2/3					
Autumn A	**Autumn B**	**Spring A**	**Spring B**	**Summer A**	**Summer B**
Purple Mash Online Safety 3.2	**Purple Mash Email 3.5**	**Purple Mash Spreadsheets 3.3**	**Purple Mash Branching Databases 3.6**	**Purple Mash Questioning 2.4**	**Purple Mash Presenting 3.9**
Key learning objectives • To know what we use passwords for and how to create a safe password. • To understand not to let anyone know or use your passwords. • To learn methods for keeping passwords safe. • To learn what a blog is and how it can be used to communicate with a wider audience. • To consider the truth of the content of a website. • To learn about the meaning of age restrictions symbols on digital media and devices.	**Key learning objectives** • To consider and discuss how and why we use ICT to communicate. • To understand what an email is and when we would write one. • To open an email. • To respond to an email. • To learn what an email address book is and how to store contacts. • To learn how to use email safely. • To add an attachment to an email and understand the importance of only opening safe attachments.	**Key learning objectives** • To build on prior knowledge and learn how to use more tools when creating a spreadsheet. • To use the symbols more than, less, than, and equal to, to compare values. • To use 2Calculate to collect data and create a bar chart. • To use 2Calculate to produce a pictogram to show data in a different way. • To use the advanced mode of 2Calculate to learn about cell references. • To print graphs and charts to show data	**Key learning objectives** • To learn what a branching database is. • To learn relevant key vocabulary. • To understand what a yes/no questions are and how these are used in branching databases. • To use 2Question to make a branching database. • To gather data using yes/no questions and create their own branching database. • To work with peers to complete each other's branching database.	**Key learning objectives** • To build on prior knowledge and deepen understanding of data handling tools. • To use yes/no questions to separate information. • To construct a binary tree to identify items. • To use 2Question to answer questions. • To use a database to answer more complex search questions. • To use the search tool to find information.	**Key learning objectives** • To understand what PowerPoint is and what it is used for. • To learn key tools in PowerPoint and create a page in a presentation. • To learn key vocabulary about PowerPoint. • To add media, animations, and timings to a presentation. • To use the skills learnt to design and create a presentation about a topic we are learning. • To learn how to save a file in PowerPoint.

	• To explore a simulated email scenario and discuss. • To secure key vocabulary relating to emails.	collections and analysis.			
Curriculum objectives ***KS1*** *- 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.* ***KS2*** *- Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*	**Curriculum objectives** ***KS1*** *- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.* *Recognise common uses of information technology beyond school.* ***KS2*** *- 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.*	**Curriculum objectives** **KS1** *- 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 logical reasoning to predict the behaviour of simple programs.*	**Curriculum objectives** ***KS1*** *- 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.* ***KS2*** *- 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*	**Curriculum objectives** **KS1 -** *Use technology purposefully to create, organise, store, manipulate and retrieve digital content.* ***KS2*** *- 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.*	**Curriculum objectives** ***KS1*** *- Use technology purposefully to create, organise, store, manipulate and retrieve digital content.* *Recognise common uses of information technology beyond school.* **KS2** - 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

		KS2 *- 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 content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.* *Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.*	*that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.*		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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Cycle A

Y4/5/6					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Purple Mash Online Safety 4.2	**Purple Mash Coding 4.1**	**Purple Mash Writing for Different Audiences 4.4**	**Purple Mash Spreadsheets 4.3**	**Purple Mash Animation 4.6**	**Purple Mash Effective Searching 4.7**
Key learning objectives • To understand what online identify theft is. • To learn how you can protect yourself from online identify theft. • To build on prior knowledge and understand that a digital footprint or trail can aid identify theft. • To understand that copying the work of others is called plagiarism and understand what the consequences of plagiarism are. • To identify the positive and negative influences of technology on health and the environment.	**Key learning objectives** • To recap on key coding vocabulary. • To begin to understand selection in computer programming. • To learn that an IF statement is a decision-making statement based on specified criteria. • To understand how to use co-ordinates in computer programming. • To understand the 'repeat until' command. • To understand how an IF/ELSE statement works.	**Key learning objectives** • To learn relevant key vocabulary. • To use 2Publish Plus to explore font styles and sizes and understand how this can have an impact of the type of writing being published. • To explore examples where the font styles and sizes are tailored to the purpose of the text. • To learn what a format is and how we use this to lay out a type of writing depending on its purpose. • To learn how to alter font by using appropriate tools.	**Key learning objectives** • To extend prior knowledge of spreadsheets by learning how to format cells. • To use 2Calculate to format cells as currency, percentage, decimal to different decimal places, and fraction. • To use the formula wizard to calculate averages. • To combine tools to make a times tables spreadsheet activity. • To use a spreadsheet to model a real-life situation. • To add a formula in a cell to automatically	**Key learning objectives** • To look at examples of animated films and cartoons and discuss what makes it good. • To learn how animations are created by hand and look at examples of stop motion animation. • To explore how animation can be created the same way by using computers. • To make simple animations using both paper and computer software. • To use 2Animate to learn how to create a simple animation and learn key vocabulary.	**Key learning objectives** • To build on prior knowledge of searching by locating information on a search results page. • To use Google to find answers to specific questions. • To create questions for peers to find the answers to using a search engine. • To learn how companies can pay to appear in top internet searches but how they are not always true and reliable. • To assess whether an information source is true and reliable.

• To understand the importance of balancing screen and game time with other parts of their life.	• To understand what a variable is in programming. • To use a number variable. • To use code to create a playable game.	• To use 2Stimulate to produce a newspaper report. • To use 2Stimulate to write for a community campaign.	make a calculation in that cell.	• To share their animations on the class display board and by blogging.	• To learn to not rely solely on one search engine for specific information, e.g., Wikipedia.
Curriculum objectives ***KS2*** *- 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.*	**Curriculum objectives** ***KS2*** *- 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*	**Curriculum objectives** ***KS2 -*** *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*	**Curriculum objectives** ***KS2 -*** *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*	**Curriculum objectives** ***KS2*** *- 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 content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.*	**Curriculum objectives** ***KS2 -*** *Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.* *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.*

	algorithms and programs.	*programs, systems and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.*	*and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.*		

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Cycle B

Y4/5/6					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Purple Mash Online Safety 5.2	**Purple Mash Coding 5.1**	**Purple Mash Word Processing 5.8**	**Purple Mash Spreadsheets 5.3**	**Purple Mash Text Adventures 6.5**	**PowerPoint**
Key learning objectives • To gain a deeper understanding of the impact sharing digital content can have. • To review sources of support when using online technology. • To review how to maintain secure passwords. • To understand the advantages and disadvantages of altering a digital image. • To understand permissions needed to alter a digital image. • To be aware of appropriate and inappropriate text, photographs, and videos and the impact of sharing these online.	**Key learning objectives** • To begin to simplify code. • To create a playable game using code. • To understand what simulation is. • To program a simulation using 2Code. • To know what decomposition and abstraction are in computer science. • To take a real-life situation, decompose it and think about the level of abstraction. • To understand how to use friction in code. • To begin to understand what a function is and how a	**Key learning objectives** • To learn what a word processing tool is and what we use it for. • To learn relevant key vocabulary. • To recall prior information by opening a word document and discussing what the different tools are used for. • To create a word document and add and edit images to it. • To know how to use word wrap with images and text. • To change the look of a text within a document.	**Key learning objectives** • To recall prior knowledge about spreadsheets by discussing their purpose and tools. • To use formulae in a spreadsheet to convert measurements of length and distance. • To use the count tool to answer hypothesis about common letters in use. • To use a spreadsheet to model a real-life problem. • To use formulae to calculate area and perimeter of shapes. • To create formulae that use text variables.	**Key learning objectives** • To understand that a text adventure is a story that uses text instead of graphics. • To use 2Connect to plan a story adventure. • To make a story-based adventure using 2Create a Story. • To learn that a Sprite is a computer graphic which may be programmed to move on-screen. • To introduce an alternative model for a text adventure which has a less sequential narrative. • To use written plans to a map-based adventure in 2Code.	**Key learning Objectives** • To recall prior information about PowerPoint by discussing key vocabulary and relevant tools. • To create a PowerPoint document understanding how to name and save it. • To create a PowerPoint presentation on a topic unit being covered in Summer term 2. • To use the internet safely and securely to research information to be used in the PowerPoint presentation. • To use the design tool to create slides.

• To understand how to ensure reliability when using different methods of online communication.	function works in code. • To understand what the different variable types are and how they are used differently. • To understand how to create a string. • To understand what concatenation is and how it works.	• To add features to a document to enhance its look and usability. • To use tables within the document to present information. • To introduce templates. • To consider page layout by using headings and columns.	• To use a spreadsheet for a real-life purpose in school such as a fundraising event.	• To fix a code if necessary to ensure that the code will run the way it is supposed to.	• To choose layouts on each slide relevant to the information being presented. • To be aware of plagiarism when using information found on the internet. • To include images, vide clips, and voice recordings in the presentation. • To use the PowerPoint to present information to the class.
Curriculum objectives ***KS2*** *- Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*	***Curriculum objectives*** ***KS2 -*** *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*	**Curriculum objectives** ***KS2 -*** *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.*	**Curriculum objectives** ***KS2*** *- 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*	**Curriculum objectives** ***KS2 -*** *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*	**Curriculum objectives** ***KS2 -*** *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*

	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*		*programs, systems and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.*	*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.* *Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*

Pott Shrigley Church School
Computing Long Term Plan

Cycle C

Y4/5/6					
Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Purple Mash Online Safety 6.2	**Purple Mash Coding 6.1**	**Purple Mash Blogging 6.4**	**Purple Mash Spreadsheets 6.9**	**Purple Mash Quizzing 6.7**	**Purple Mash Networks 6.6**
Key learning Objectives • To recall prior knowledge and key vocabulary about online safety through discussion. • To identify benefits and risks of mobile devices broadcasting the location of the user/device. • To identify secure sites by looking for privacy shields of approval. • To identify the benefits and risks of giving personal information. • To review the meaning of digital footprint. • To have a clear idea of appropriate online behaviour.	**Key learning objectives** • To recall prior knowledge about coding and key vocabulary through discussion. • To design a playable game with a timer and score. • To understand how the launch button works. • To use functions an understand why they are useful. • To understand how functions are created and called. • To use flowcharts to create and debug code. • To create simulation of a room in which	**Key learning objectives** • To explore a range of blogs and identify the purpose of writing a blog. • To identify the features of a successful blog. • To plan a theme and content for a blog. • To understand how to write a blog and a blog post. • To consider the effect upon the audience of changing the visual properties of a blog. • To understand how to contribute to an existing blog. • To understand why and how blog posts are approved by the teacher.	**Key learning objectives** • To recall prior knowledge and vocabulary about spreadsheets. • To use Google Sheets to create a spreadsheet. • To navigate Google Sheets and enter data in a cell. • To introduce some basic data formulae for percentages, averages, and max and min numbers. • To demonstrate how the use of spreadsheets can save time and effort when performing calculations.	**Key learning objectives** • To learn key vocabulary relating to online quizzes. • To understand what online quizzes can be used for and how they can reach target audiences. • To create a picture-based quiz for a specific target audience. • To build on prior knowledge using 2Quiz to create different style quiz questions. • To explore the grammar quizzes. • To make a quiz that requires the player to search a database.	**Key learning objectives** • To learn who invented the internet and what year it was invented. • To learn what the internet consists of. • To find out what a LAN and WAN are. • To learn what a router is and how the internet is accessed at school. • To learn what a Hub/Switch is and what it is used for. • To research information about the internet and how it has evolved since it was first invented. • To hold a discussion about what the future

• To understand how information online can persist.	devices can be controlled. • To understand how user input can be used in a program.	• To understand the importance of commenting on blogs.	• To use a spreadsheet to model a situation. To demonstrate how a spreadsheet can complex data clear by manipulating the way it is presented. • To create a variety of graphs in sheets. • To apply spreadsheet skills to solving problems.	• To make a quiz to test on younger pupils within the school.	might hold for the internet and ICT.
Curriculum objectives **KS2 -** *Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*	**Curriculum objectives** ***KS2 -*** *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.*	**Curriculum objectives** ***KS2 -*** *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*	**Curriculum objectives** ***KS2*** *- 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 content that accomplish given*	**Curriculum objectives** ***KS2 -*** *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.*	**Curriculum objectives** **KS2 -** *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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	*acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.*	*goals, including collecting, analysing, evaluating, and presenting data and information.*	*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.*	