Key Skills
Basic Computer Use / How a Computer Works, E-safety, Creating and Debugging

Computing Curriculum Progression Map

Computing skills should be taught when linked to themes where possible to ensure real world application
Themes are taught on a 2 year rolling programme

NC statutory requirement Skills Knowledge

	EYFS		KS1		LKS2		UKS2	
	Nursery & Reception		Year 1 & Year 2		Year 3 & Year 4		Year 5 & Year 6	
	Year A	Year B	Year A	Year B	Year A	Year B	Year A	Year B
	Autumn: Harvest/Light and Dark **Spring:** Winter Wonderland/Superheroes **Summer:** Big and Small/Summer Fun	**Autumn:** Colours/Let's Celebrate **Spring:** Bears/A Job Well Done **Summer:** Marvellous Minibeasts/Summer in the Garden	**Autumn:** Let's Go on Safari **Spring:** Poles Apart **Summer:** Around the World in 80 Days	**Autumn:** Oh I do Like to be Beside the Seaside/Then and Now **Spring:** Turrets and Tiaras **Summer:** The Secret Garde	**Autumn:** The Land that Time Forgot **Spring:** Romans **Summer:** Rainforests	**Autumn:** Egyptians **Spring:** Over and Under the Waves **Summer:** WWII Friend or Foe	**Autumn:** Extreme Earth **Spring:** Who Were the Mayans? **Summer:** Evolution and Inheritance	**Autumn:** Myths and Minotaurs **Spring:** Out of this World **Summer:** Circle of Life – Vikings vs Anglo-Saxons
Basic Computer Use / How a Computer Works	Learning how to turn on a monitor, tower, laptop, iPad and understanding how these are connected. Using the touch screen, cursor and keyboard. Play simple games using the touch screen of an iPad and beginning to get used to the cursor of a computer or laptop.		Start up and shut down devices. Left and right-clicking the mouse. Basic typing and keyboard skills. Researching a topic using the web. Record their voices using an iPad. To play a coding-based game. To work out a sequence of instructions (algorithm) to find	Start up and shut down devices. Left and right-clicking the mouse. Basic typing and keyboard skills. Taking photographs. To crop, filter and delete photos. To add photos to albums. To learn basic skills on Google Sheets, such as inputting and filtering.	Having confidence in their keyboard use and speed, both on iPads and laptops. Logging on and off independently. To analyse data on Google Sheets and Google forms. Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for	Having confidence in their keyboard use and speed, both on iPads and laptops. Logging on and off independently. To work out how a number of games have been coded. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Plan and create own algorithms.	Having confidence in cursor and keyboard use and manipulating documents, by sending, opening, creating and formatting them. Creating and editing a webpage collaboratively, using HTMLs. To solve problems involving searching and sorting information. Use sequence, selection, and repetition in programs; work with variables and	Having confidence in cursor and keyboard use and manipulating documents, by sending, opening, creating and formatting them. Coding games using HTMLs. To understand how to know if a source of information is reliable or not. Understand computer networks including the internet; how they can provide multiple services, such as the world wide web;

			their way to an objective. Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. To know how stop-motion animations are made.	To use simple inputs and outputs on Scratch. Recognise common uses of information technology beyond school.	communication and collaboration. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	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. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	and the opportunities they offer for communication and collaboration.
	EYFS		**KS1**		**LKS2**		**UKS2**	
	Nursery & Reception		**Year 1 & Year 2**		**Year 3 & Year 4**		**Year 5 & Year 6**	
	Year A	**Year B**	**Year A**	**Year B**	**Year A**	**Year B**	**Year A**	**Year B**
E-safety	Listen to, understand and discuss an e-safety story each term to introduce the key ideas.	Listen to, understand and discuss an e-safety story each term to introduce the key ideas.	To know some of the dangers online. To know who to tell if something does not feel right. To know what some of our personal information is and the importance of not sharing it. Use technology safely and	To know some of the dangers online. To know who to tell if something does not feel right. To know what some of our personal information is and the importance of not sharing it. Use technology safely and	To understand some of the negative behaviours online. To tell others how to stay safe online. To know how to make a safe profile. To start to learn about what is safe to post online. To know how to	To understand some of the negative behaviours online. To tell others how to stay safe online. To know how to make a safe profile. To start to learn about what is safe to post online. To know how to	To know what you should and should not post online. To begin to understand what is meant by a digital footprint. To learn about terms, such as catfishing and scamming, and some of the reasons a person might do it.	To know what you should and should not post online. To begin to understand what is meant by a digital footprint. To learn about terms, such as catfishing and scamming, and some of the reasons a person might do it.

			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.	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.	report negative behaviour. Use technology safely, respectfully and responsibly. Recognise acceptable/unacceptable behaviour.	report negative behaviour. Use technology safely, respectfully and responsibly. Recognise acceptable/unacceptable behaviour.	To know a number of ways to report negative behaviour. Identify a range of ways to report concerns about content and contact.	To know a number of ways to report negative behaviour. To learn about the importance of password security. Identify a range of ways to report concerns about content and contact.
	EYFS		**KS1**		**LKS2**		**UKS2**	
	Nursery & Reception		**Year 1 & Year 2**		**Year 3 & Year 4**		**Year 5 & Year 6**	
	Year A	**Year B**	**Year A**	**Year B**	**Year A**	**Year B**	**Year A**	**Year B**
Creating	Simple designs (mark making) on media such as paint.		Create Google Slide presentations. To insert images in to a Google Slide presentation. To create and test sequences on a Bee-bot programme App. To create a Stop Motion animation on the iPad. To create Art using a range of programmes based on a number of famous artists. Create simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital	To be more confident with filming skills. To record audibly as well as visually. To create a table on Google Sheets. To create rhythmic and repeating patterns. Create simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	To present information in a number of different ways, including Google Sites. To create geometric Art on a number of programs. To display findings in a number of ways, for example graphs and charts. To plan and create a survey on Google Forms. 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	To create their own micro:bit project. To program an animation on Scratch. 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.	Creating 3D visual spaces. Experimenting with visual reality design and artificial intelligence. To amalgamate original video footage with other sources of media. 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.	To write instructions for and then publish their own game. To add narration to their own game. To use their knowledge of micro:bit to program a toy. 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.		given goals, including collecting, analysing, evaluating and presenting data and information.			
	EYFS		**KS1**		**LKS2**		**UKS2**	
	Nursery & Reception		**Year 1 & Year 2**		**Year 3 & Year 4**		**Year 5 & Year 6**	
	Year A	**Year B**	**Year A**	**Year B**	**Year A**	**Year B**	**Year A**	**Year B**
Debugging	Practising and learning what to do if something goes wrong or doesn't look the way you expect it to.		To work out the rules (algorithms) for a range of different games. To edit a Stop Motion animation. Debug simple programs. Use logical reasoning to predict the behaviour of simple programs.	To experiment with rhythmic sounds and patterns. To edit images and audio clips. To amalgamate pieces using images and sounds. Debug simple programs. Use logical reasoning to predict the behaviour of simple programs.	Editing and improving a Google Slide presentation by changing backgrounds and fonts for example. To review and edit pieces made by myself and others. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	To modify games, including ones made by themselves and their peers. Editing and putting together video and audio. Editing and recording digital music. Identify and correct a number of different types of bugs. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	To solve problems involving VR design and AI. To critically evaluate a program made for its intended audience. To debug their own game script. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	To create, test and improve games made by themselves and others. To encrypt and decrypt messages in ciphers and codes. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.