	COMPUTING SYSTEMS & NETWORKS	CREATING MEDIA	DATA & INFORMATION	PROGRAMMING
EYFS	To complete a Technology Walk in school To identify technology in the home (homework) To identify games from the past and present and look how they are different To use computer keyboards in the roleplay area To identify capital letter (to use a computer keyboard) To open an app on an iPad To identify trusted adults To talk about good and bad choices when using technology	To recognise an input (finger, pen) can create an output (drawing, letter) To add shapes to Tux paint To begin to use a keyboard To begin to use a mouse To begin to recognise text and images when using ICT To	To begin to count objects To begin to group objects To compare objects using language bigger, smaller	To follow oral instructions To identify repeating patterns To investigate floor robots To learn directional langauge To explore options and make choices with toys, software and websites
YEAR 1	**Technology All Around Us** To identify technology To identify a computer and its main parts To use a mouse in different ways To use a keyboard to type on a computer To use the keyboard to edit text To create rules for using technology responsibly	**Digital Painting** To describe what different freehand tools do To use the shape tool and the line tools To make careful choices when painting a digital picture To explain why I chose the tools I used To use a computer on my own to paint a picture To compare painting a picture on a computer and on paper **Digital Writing** To use a computer to write To add and remove text on a computer To identify that the look of text can be changed on a computer To make careful choices when changing text To explain why I used the tools that I chose To compare typing on a computer to writing on paper		**Moving A Robot** To explain what a given command will do To act out a given word To combine forwards and backwards commands to make a sequence To combine four direction commands to make sequences To plan a simple program To find more than one solution to a problem **Animations** To choose a command for a given purpose To show that a series of commands can be joined together To identify the effect of changing a value To explain that each sprite has its own instructions To design the parts of a project To use my algorithm to create a program

YEAR 2	Information technology around us	Digital Photography	Pictograms	Robot algorithms
	To recognise the uses and features of information technology To identify information technology in the home To identify information technology beyond school To explain how information technology benefits us To show how to use information technology safely To recognise that choices are made when using information technology	To use a digital device to take a photograph To make choices when taking a photograph To describe what makes a good photograph To decide how photographs can be improved To use tools to change an image To recognise that photos can be changed	To recognise that we can count and compare objects using tally charts To recognise that objects can be represented as pictures To create a pictogram To select objects by attribute and make comparisons To recognise that people can be described by attributes To explain that we can present information using a computer	To describe a series of instructions as a sequence To explain what happens when we change the order of instructions To use logical reasoning to predict the outcome of a program (series of commands) To explain that programming projects can have code and artwork To design an algorithm To create and debug a program that I have written **Introduction to quizzes** To explain that a sequence of commands has a start To explain that a sequence of commands has an outcome To create a program using a given design To change a given design To create a program using my own design To decide how my project can be improved
YEAR 3	**Connecting computers**	**Stop-frame animation**	**Branching databases**	**Sequence in music**
	To explain how digital devices function To identify input and output devices To recognise how digital devices can change the way we work To explain how a computer network can be used to share information To explore how digital devices can be connected To recognise the physical components of a network	To explain that animation is a sequence of drawings or photographs To relate animated movement with a sequence of images To plan an animation To identify the need to work consistently and carefully To review and improve an animation To evaluate the impact of adding other media to an animation **Desktop publishing** To recognise how text and images convey information To recognise that text and layout can be edited To choose appropriate page settings To add content to a desktop publishing publication To consider how different layouts can suit different purposes To consider the benefits of desktop publishing	To create questions with yes/no answers To identify the object attributes needed to collect relevant data To create a branching database To identify objects using a branching database To explain why it is helpful for a database to be well structured To compare the information shown in a pictogram with a branching database	To explore a new programming environment I can identify that each sprite is controlled by the commands I choose To explain that a program has a start To recognise that a sequence of commands can have an order To change the appearance of my project To create a project from a task description

YEAR 4	**The internet**	**Audio production**		**Repetition in shapes**
	To describe how networks physically connect to other networks To recognise how networked devices make up the internet To outline how websites can be shared via the World Wide Web To describe how content can be added and accessed on the World Wide Web To recognise how the content of the WWW is created by people To evaluate the consequences of unreliable content	To identify that sound can be recorded To explain that audio recordings can be edited To recognise the different parts of creating a podcast project To apply audio editing skills independently To combine audio to enhance my podcast project To evaluate the effective use of audio **Photo Editing** To explain that the composition of digital images can be changed To explain that colours can be changed in digital images To explain how cloning can be used in photo editing To explain that images can be combined To combine images for a purpose To evaluate how changes can improve an image		To identify that accuracy in programming is important To create a program in a text-based language To explain what 'repeat' means To modify a count-controlled loop to produce a given outcome To decompose a program into parts To create a program that uses count-controlled loops to produce a given outcome **Repetition in games** To develop the use of count-controlled loops in a different programming environment To explain that in programming there are infinite loops and count controlled loops To develop a design which includes two or more loops which run at the same time To modify an infinite loop in a given program To design a project that includes repetition To create a project that includes repetition
YEAR 5	**Systems and searching**	**Video Production**	**Flat-file databases**	**Selection in Quizzes**
	To explain that computers can be connected together to form systems To recognise the role of computer systems in our lives To experiment with search engines To describe how search engines select results To explain how search results are ranked To recognise why the order of results is important, and to whom	To explain what makes a video effective To identify digital devices that can record video To capture video using a range of techniques To create a storyboard To identify that video can be improved through reshooting and editing To consider the impact of the choices made when making and sharing a video **Vector drawing** To identify that drawing tools can be used to produce different outcomes To create a vector drawing by combining shapes To use tools to achieve a desired effect To recognise that vector drawings consist of layers To group objects to make them easier to work with To evaluate my vector drawing	To use a form to record information To compare paper and computer-based databases To outline how grouping and then sorting data allows us to answer questions To explain that tools can be used to select specific data To explain that computer programs can be used to compare data visually To apply my knowledge of a database to ask and answer real-world questions	To explain how selection is used in computer programs To relate that a conditional statement connects a condition to an outcome To explain how selection directs the flow of a program To design a program which uses selection To create a program which uses selection To evaluate my program

YEAR 6		Web page creation	Spreadsheets	Variables in games
		To review an existing website and consider its structure	To create a data set in a spreadsheet	To define a 'variable' as something that is changeable
		To plan the features of a web page	To build a data set in a spreadsheet	To explain why a variable is used in a program
		To consider the ownership and use of images (copyright)	To explain that formulas can be used to produce calculated data	To choose how to improve a game by using variables
		To recognise the need to preview pages	To apply formulas to data	To design a project that builds on a given example
		To outline the need for a navigation path	To create a spreadsheet to plan an event	To use my design to create a project
		To recognise the implications of linking to content owned by other people	To choose suitable ways to present data	To evaluate my project
				Sensing
				To create a program to run on a controllable device
				To explain that selection can control the flow of a program
				To update a variable with a user input
				To use an conditional statement to compare a variable to a value
				To design a project that uses inputs and outputs on a controllable device
				To develop a program to use inputs and outputs on a controllable device