



	EYFS:	Key Stage 1:	Key Stage 2:
Statutory Framework Objectives	<p><i>Within the new EYFS framework 'Technology' has been removed from 'Understanding the World' therefore we have used statements from the 2020 Development Matters document and the Early Learning Goals which have direct links to the KS1/KS2 National Curriculum for Computing.</i></p> <p>Computer Science</p> <ul style="list-style-type: none"> Be confident to try new activities and show independence, resilience and perseverance in the face of challenge (ELG) Explain the reasons for rules (ELG) Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen (debugging code) (DM) Begin to predict sequences because they know routines (using code-a-pillars to predict and create algorithms) (DM) <p>Information Technology</p> <ul style="list-style-type: none"> Match their developing physical skills to tasks and activities in the setting (choosing appropriate technology) (DM) Explore, use and refine a variety of artistic effects to express their ideas and feelings (using the drawing/video tool in Seesaw to create and record content) DM) Share their process; explaining the process they have used. (ELG) <p>Internet Safety</p> <ul style="list-style-type: none"> Remember rules without 	<p>Computer Science</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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 <p>Information Technology</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school <p>Internet Safety</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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>Computer Science</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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 <p>Information Technology</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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 <p>Internet Safety</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> 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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	<ul style="list-style-type: none"> needing an adult to remind them (DM) Know and talk about the different factors that support their overall health and wellbeing (sensible amounts of screen time) (DM) Confidently and safely use a range apparatus alone and in a group (DM) Safely use and explore a variety of materials, tools and techniques (ELG) 							
Skill/knowledge	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Algorithms — Be able to comprehend, design, create, and evaluate algorithms</p> <p>(Computer Science)</p>	<ul style="list-style-type: none"> -To follow simple oral algorithms -To predict and spot simple patterns - To sequence familiar tasks 		<p><u>Programming A – Moving a robot</u></p> <ul style="list-style-type: none"> -To explain what a given command will do -To act out a given word -To plan a simple program -To find more than one solution to a problem <p><u>Programming B - Programming animations</u></p> <ul style="list-style-type: none"> -To use my algorithm to create a program 	<p><u>Programming A – Robot algorithms</u></p> <ul style="list-style-type: none"> -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 -To explain that programming projects can have code and artwork -To design an algorithm -To create and debug a program that I have written 	<p><u>Programming A - Sequencing sounds</u></p> <ul style="list-style-type: none"> -To create a project from a task description 	<p><u>Programming A – Repetition in shapes</u></p> <ul style="list-style-type: none"> -To identify that accuracy in programming is important -To explain what 'repeat' means -To decompose a task into small steps <p><u>Programming B – Repetition in games</u></p> <ul style="list-style-type: none"> -To explain that in programming there are infinite loops and count controlled loops 	<p><u>Programming B – Selection in quizzes</u></p> <ul style="list-style-type: none"> -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 	
<p>Programming — Create software to allow computers to solve problems</p> <p>(Computer Science)</p>	<ul style="list-style-type: none"> - To input a simple sequence of commands to control a robot (with support using cubettos and code-a-pillars) 		<p><u>Programming A – Moving a robot</u></p> <ul style="list-style-type: none"> -To combine forwards and backwards commands to make a sequence -To combine four direction commands to make sequences <p><u>Programming B - Programming animations</u></p>	<p><u>Programming A – Robot algorithms</u></p> <ul style="list-style-type: none"> -To use logical reasoning to predict the outcome of a program -To explain that programming projects can have code and artwork -To create and debug a program that I have written <p><u>Programming B -</u></p>	<p><u>Programming A - Sequencing sounds</u></p> <ul style="list-style-type: none"> -To explore a new programming environment -To identify that commands have an outcome -To explain that a program has a start -To recognise that a sequence of commands can have an order 	<p><u>Programming A – Repetition in shapes</u></p> <ul style="list-style-type: none"> -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 	<p><u>Programming A – Selection in physical computing</u></p> <ul style="list-style-type: none"> -To control a simple circuit connected to a computer -To write a program that includes count-controlled loops -To explain that a loop can stop when a condition is met -To explain that a loop can be used to 	<p><u>Data and information – Spreadsheets</u></p> <ul style="list-style-type: none"> -To explain that formulas can be used to produce calculated data -To apply formulas to data <p><u>Programming A – Variables in games</u></p> <ul style="list-style-type: none"> -To define a 'variable' as something that is



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		<ul style="list-style-type: none"> -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 	<p><u>Programming quizzes</u></p> <ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> -To change the appearance of my project -To create a project from a task description <p><u>Programming B - Events and actions in programs</u></p> <ul style="list-style-type: none"> -To explain how a sprite moves in an existing project -To create a program to move a sprite in four directions -To adapt a program to a new context -To develop my program by adding features -To identify and fix bugs in a program -To design and create a maze-based challenge 	<ul style="list-style-type: none"> -To decompose a task into small steps -To create a program that uses count-controlled loops to produce a given outcome <p><u>Programming B – Repetition in games</u></p> <ul style="list-style-type: none"> -To develop the use of count-controlled loops in a different programming environment -To explain that in programming there are infinite loops and count controlled loops -To develop a design that includes two or more loops which run at the same time -To modify an infinite loop in a given program -To design a project that includes repetition -To create a project that includes repetition 	<p>repeatedly check whether a condition has been met</p> <ul style="list-style-type: none"> -To design a physical project that includes selection -To create a program that controls a physical computing project <p><u>Programming B – Selection in quizzes</u></p> <ul style="list-style-type: none"> -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 	<p>changeable</p> <ul style="list-style-type: none"> -To explain why a variable is used in a program -To choose how to improve a game by using variables -To design a project that builds on a given example -To use my design to create a project -To evaluate my project <p><u>Programming B - Sensing movement</u></p> <ul style="list-style-type: none"> -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 a 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
<p>Creating media — Select and create a range of media including text, images, sounds, and video</p> <p>(Information Technology)</p>	<ul style="list-style-type: none"> - To know the difference between photography and video - To take a photograph using the camera - To move and resize images with my fingers or mouse. - To animate a simple image - To create a simple animation to tell a story. - To create a simple digital collage. - To record a short film using the camera - To watch films back 	<p><u>Creating media – Digital painting</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media – Digital photography</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media – Desktop publishing</u></p> <ul style="list-style-type: none"> -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 	<p><u>Computing systems and networks – The Internet</u></p> <ul style="list-style-type: none"> -To describe how content can be added and accessed on the World Wide Web (WWW) <p><u>Creating media - Audio production</u></p> <ul style="list-style-type: none"> -To explain that audio recordings can be edited -To recognise the different parts of 	<p><u>Creating media – Introduction to vector graphics</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media – 3D Modelling</u></p> <ul style="list-style-type: none"> -To recognise that you can work in three dimensions on a computer -To identify that digital 3D objects can be modified -To recognise that objects can be combined in a 3D model -To create a 3D model for a given purpose -To plan my own 3D model



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	<ul style="list-style-type: none"> - To explore the paint and brush tools within an app - To scan a QR code - To explore a 360 image - To record my voice over a picture. - To record sounds with different resources - To find ways to change my voice (tube, tin can, shouting, create an echo) 	<p>and on paper</p> <p><u>Creating media – Digital writing</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media - Digital music</u></p> <ul style="list-style-type: none"> -To say how music can make us feel -To identify that there are patterns in music -To experiment with sound using a computer -To use a computer to create a musical pattern -To create music for a purpose -To review and refine our computer work 	<p>benefits of desktop publishing</p> <p><u>Creating media - Stop-frame animation</u></p> <ul style="list-style-type: none"> -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 <p><u>Programming A - Sequencing sounds</u></p> <ul style="list-style-type: none"> -To create a project from a task description 	<p>creating a podcast project</p> <ul style="list-style-type: none"> -To apply audio editing skills independently -To combine audio to enhance my podcast project -To evaluate the effective use of audio <p><u>Creating media – Photo editing</u></p> <ul style="list-style-type: none"> -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 	<p>work with</p> <ul style="list-style-type: none"> -To apply what I have learned about vector drawings <p><u>Creating media - Video production</u></p> <ul style="list-style-type: none"> -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 	<ul style="list-style-type: none"> -To create my own digital 3D model <p><u>Creating media – Web page creation</u></p> <ul style="list-style-type: none"> -To review an existing website and consider its structure -To plan the features of a web page -To consider the ownership and use of images (copyright) -To recognise the need to preview pages -To outline the need for a navigation path -To recognise the implications of linking to content owned by other people <p><u>Data and information – Spreadsheets</u></p> <ul style="list-style-type: none"> -To choose suitable ways to present data
<p>Computer systems — Understand what a computer is, and how its constituent parts function together as a whole</p> <p>(Information Technology)</p>	<ul style="list-style-type: none"> - To use a mouse or touch screen to target and select options on a screen - To play on a touch screen using keyboards and amuse in play 	<p><u>Computing systems and networks – Technology around us</u></p> <ul style="list-style-type: none"> -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 	<p><u>Computing systems and networks – IT around us</u></p> <ul style="list-style-type: none"> -To recognise the uses and features of information technology -To identify the uses of information technology in the school -To identify information technology beyond school -To explain how information technology helps us -To explain how to use information technology safely -To recognise that choices are made when using information technology 	<p><u>Computing systems and networks – Connecting computers</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media - Audio production</u></p> <ul style="list-style-type: none"> -To identify that sound can be recorded -To explain that audio recordings can be edited <p><u>Data and information – Data logging</u></p> <ul style="list-style-type: none"> -To use a digital device to collect data automatically -To explain that a data logger collects 'data points' from sensors over time -To identify the data needed to answer questions " -To use data from sensors to answer 	<p><u>Computing systems and networks - Systems and searching</u></p> <ul style="list-style-type: none"> -To explain that computers can be connected together to form systems -To recognise the role of computer systems in our lives <p><u>Creating media - Video production</u></p> <ul style="list-style-type: none"> -To identify digital devices that can record video <p><u>Programming A – Selection in physical computing</u></p> <ul style="list-style-type: none"> -To control a simple 	<p><u>Programming B - Sensing movement</u></p> <ul style="list-style-type: none"> -To design a physical project that includes selection -To create a program that controls a physical computing project -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 a conditional statement to compare a variable to a value



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			<p><u>Creating media – Digital photography</u></p> <ul style="list-style-type: none"> -To use a digital device to take a photograph -To make choices when taking a photograph 		<p>questions</p>	<p>circuit connected to a computer</p> <ul style="list-style-type: none"> -To write a program that includes count-controlled loops -To explain that a loop can stop when a condition is met -To design a physical project that includes selection -To create a program that controls a physical computing project 	
<p>Design and development — Understand the activities involved in planning, creating, and evaluating computing artefacts</p> <p>(Information Technology)</p>	<ul style="list-style-type: none"> - To know the difference between photography and video. - To take a photograph using the camera - To move and resize images with my fingers or mouse. - To animate a simple image - To create a simple animation to tell a story - To create a simple digital collage - To record a short film using the camera - To watch films back - To explore the paint and brush tools within an app - To scan a QR code - To explore a 360 image - To record my voice over a picture -To record sounds with different resources - To find ways to change my voice (tube, tin can, shouting, create an echo) - To know that work I create belongs to me (Project Evolve) 	<p><u>Creating media – Digital painting</u></p> <ul style="list-style-type: none"> -To explain why I chose the tools I used -To compare painting a picture on a computer and on paper <p><u>Creating media – Digital writing</u></p> <ul style="list-style-type: none"> -To explain why I used the tools that I chose <p><u>Programming A – Moving a robot</u></p> <ul style="list-style-type: none"> -To plan a simple program <p><u>Programming B - Programming animations</u></p> <ul style="list-style-type: none"> -To use my algorithm to create a program -To design the parts of a project 	<p><u>Creating media – Digital photography</u></p> <ul style="list-style-type: none"> -To describe what makes a good photograph -To decide how photographs can be improved <p><u>Creating media - Digital music</u></p> <ul style="list-style-type: none"> -To create music for a purpose <p><u>Programming A – Robot algorithms</u></p> <ul style="list-style-type: none"> -To explain that programming projects can have code and artwork -To design an algorithm -To create and debug a program that I have written <p><u>Programming B - Programming quizzes</u></p> <p><u>Programming B -</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media – Desktop publishing</u></p> <ul style="list-style-type: none"> -To consider how different layouts can suit different purposes -To consider the benefits of desktop publishing <p><u>Creating media - Stop-frame animation</u></p> <ul style="list-style-type: none"> -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 <p><u>Data and information – Branching databases</u></p> <ul style="list-style-type: none"> -To explain why it is helpful for a database to be well structured -To independently create an identification tool <p><u>Programming A - Sequencing sounds</u></p> <ul style="list-style-type: none"> -To change the appearance of my project -To create a project 	<p><u>Creating media - Audio production</u></p> <ul style="list-style-type: none"> -To explain that audio recordings can be edited -To recognise the different parts of creating a podcast project -To evaluate the effective use of audio <p><u>Creating media – Photo editing</u></p> <ul style="list-style-type: none"> -To explain how cloning can be used in photo editing -To evaluate how changes can improve an image <p><u>Programming B – Repetition in games</u></p> <ul style="list-style-type: none"> -To develop the use of count-controlled loops in a different programming environment -To develop a design that includes two or more loops which run at the same time -To design a project that includes repetition -To create a project that includes repetition 	<p><u>Computing systems and networks - Systems and searching</u></p> <ul style="list-style-type: none"> -To recognise why the order of results is important, and to whom <p><u>Creating media – Introduction to vector graphics</u></p> <ul style="list-style-type: none"> -To apply what I have learned about vector drawings <p><u>Creating media - Video production</u></p> <ul style="list-style-type: none"> -To explain what makes a video effective -To create a storyboard -To consider the impact of the choices made when making and sharing a video <p><u>Data and information – Flat-file databases</u></p> <ul style="list-style-type: none"> -To compare paper and computer-based databases <p><u>Programming A – Selection in physical computing</u></p> <ul style="list-style-type: none"> -To design a physical project that includes 	<p><u>Computing systems and networks - Communication and collaboration</u></p> <ul style="list-style-type: none"> -To evaluate different methods of online communication <p><u>Creating media – 3D Modelling</u></p> <ul style="list-style-type: none"> -To plan my own 3D model -To create my own digital 3D model <p><u>Creating media – Web page creation</u></p> <ul style="list-style-type: none"> -To review an existing website and consider its structure -To plan the features of a web page -To consider the ownership and use of images (copyright) -To recognise the need to preview pages -To outline the need for a navigation path -To recognise the implications of linking to content owned by other people <p><u>Programming A – Variables in games</u></p>



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	- To name my work (Project Evolve)		improved	from a task description <u>Programming B - Events and actions in programs</u> -To identify and fix bugs in a program -To design and create a maze-based challenge		selection -To create a program that controls a physical computing project <u>Programming B – Selection in quizzes</u> -To design a program which uses selection -To create a program which uses selection -To evaluate my program	-To choose how to improve a game by using variables -To design a project that builds on a given example -To use my design to create a project -To evaluate my project <u>Programming B - Sensing movement</u> -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
Data and information — Understand how data is stored, organised, and used to represent real-world artefacts and scenarios (Information Technology)	- To identify a chart - To sort physical objects (take a picture and discuss what I have done) - To collect and record information - To present simple data on a digital device.	<u>Data and information – Grouping data</u> -To label objects -To identify that objects can be counted -To describe objects in different ways -To count objects with the same properties -To compare groups of objects -To answer questions about groups of objects	<u>Data and information – Pictograms</u> -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	<u>Data and information – Branching databases</u> -To create questions with yes/no answers -To identify the attributes needed to collect data about an object -To create a branching database -To explain why it is helpful for a database to be well structured -To plan the structure of a branching database -To independently create an identification tool	<u>Creating media - Audio production</u> -To identify that sound can be recorded -To recognise the different parts of creating a podcast project <u>Data and information – Data logging</u> -To explain that data gathered over time can be used to answer questions -To use a digital device to collect data automatically -To explain that a data logger collects 'data points' from sensors over time -To recognise how a computer can help us analyse data -To identify the data needed to answer questions -To use data from sensors to answer questions	<u>Creating media – Introduction to vector graphics</u> -To identify that drawing tools can be used to produce different outcomes <u>Data and information – Flat-file databases</u> -To use a form to record information -To compare paper and computer-based databases -To outline how you can answer questions by grouping and then sorting data -To explain that tools can be used to select specific data -To explain that computer programs can be used to compare data visually -To use a real-world database to answer questions	<u>Data and information – Spreadsheets</u> -To create a data set in a spreadsheet -To build a data set in a spreadsheet -To explain that formulas can be used to produce calculated data -To apply formulas to data -To create a spreadsheet to plan an event -To choose suitable ways to present data



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<p>Effective use of tools — Use software tools to support computing work</p> <p>(Information Technology)</p>	<ul style="list-style-type: none"> - To take a photograph using the camera app - To move and resize images with my fingers or mouse - To animate a simple image - To create a simple animation to tell a story - To create a simple digital collage - To record a short film using the camera app - To watch films back - To explore the paint and brush tools within an app - To record my voice over a picture - To record sounds with different resources 	<p><u>Digital writing</u> <u>Computing systems and networks – Technology around us</u></p> <ul style="list-style-type: none"> -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 <p><u>Creating media – Digital painting</u></p> <ul style="list-style-type: none"> -To explain why I chose the tools I used -To compare painting a picture on a computer and on paper -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 use a computer on my own to paint a picture <p><u>Creating media – Digital writing</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media - Digital music</u></p> <ul style="list-style-type: none"> -To create music for a purpose -To review and refine our computer work <p><u>Creating media – Digital photography</u></p> <ul style="list-style-type: none"> -To make choices when taking a photograph -To decide how photographs can be improved -To use tools to change an image -To recognise that photos can be changed <p><u>Data and information – Pictograms</u></p> <ul style="list-style-type: none"> -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 	<p><u>Creating media – Desktop publishing</u></p> <ul style="list-style-type: none"> -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 <p><u>Creating media - Stop-frame animation</u></p> <ul style="list-style-type: none"> -To explain that animation is a sequence of drawings or photographs -To relate animated movement with a sequence of images -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 <p><u>Data and information – Branching databases</u></p> <ul style="list-style-type: none"> -To create a branching database -To explain why it is helpful for a database to be well structured -To plan the structure of a branching database <p><u>Programming A - Sequencing sounds</u></p> <ul style="list-style-type: none"> -To explore a new 	<p><u>Creating media - Audio production</u></p> <ul style="list-style-type: none"> -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 <p><u>Creating media – Photo editing</u></p> <ul style="list-style-type: none"> -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 <p><u>Data and information – Data logging</u></p> <ul style="list-style-type: none"> -To use a digital device to collect data automatically -To explain that a data logger collects 'data points' from sensors over time -To recognise how a computer can help us analyse data -To identify the data needed to answer 	<p><u>Computing systems and networks - Systems and searching</u></p> <ul style="list-style-type: none"> -To explain how search results are ranked -To recognise why the order of results is important, and to whom <p><u>Creating media – Introduction to vector graphics</u></p> <ul style="list-style-type: none"> -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 <p><u>Creating media - Video production</u></p> <ul style="list-style-type: none"> -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 <p><u>Data and information – Flat-file databases</u></p> <ul style="list-style-type: none"> -To use a form to record information -To explain that tools can be used to select specific data -To explain that 	<p><u>Computing systems and networks - Communication and collaboration</u></p> <ul style="list-style-type: none"> -To explain the importance of internet addresses -To recognise how data is transferred across the internet -To explain how sharing information online can help people to work together -To evaluate different ways of working together online -To recognise how we communicate using technology -To evaluate different methods of online communication <p><u>Creating media – 3D Modelling</u></p> <ul style="list-style-type: none"> -To recognise that you can work in three dimensions on a computer -To identify that digital 3D objects can be modified -To recognise that objects can be combined in a 3D model -To create a 3D model for a given purpose -To plan my own 3D model -To create my own digital 3D model <p><u>Creating media – Web page creation</u></p> <ul style="list-style-type: none"> -To recognise the need to preview pages -To outline the need for
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Hitherfield Primary School Progression Framework for: Computing

		a computer to writing on paper		programming environment <u>Programming B - Events and actions in programs</u> -To explain how a sprite moves in an existing project -To create a program to move a sprite in four directions	questions <u>Programming A – Repetition in shapes</u> -To create a program in a text-based language	computer programs can be used to compare data visually -To use a real-world database to answer questions	a navigation path -To recognise the implications of linking to content owned by other people <u>Data and information – Spreadsheets</u> -To explain that formulas can be used to produce calculated data -To apply formulas to data -To create a spreadsheet to plan an event -To choose suitable ways to present data
Impact of technology — Understand how individuals, systems, and society as a whole interact with computer systems (Information Technology)	-To recognise some ways in which the internet can be used to communicate -To identify ways that I can put information on the internet -To talk about how I can use the internet to find things out -To identify devices I could use to access information on the internet - To know that work I create belongs to me - To name my work - To identify some simple personal information (name, address, birthday, age, location) (all Project Evolve)	<u>Computing systems and networks –</u> -To identify technology <u>Technology around us</u> <u>Programming A – Moving a robot</u> -To act out a given word	<u>Computing systems and networks – IT around us</u> -To identify the uses of information technology in the school -To identify information technology beyond school -To explain how information technology helps us -To recognise that choices are made when using information technology	<u>Computing systems and networks – Connecting computers</u> -To recognise how digital devices can change the way we work <u>Creating media – Desktop publishing</u> -To consider the benefits of desktop publishing	<u>Computing systems and networks – The Internet</u> -To evaluate the consequences of unreliable content <u>Creating media – Photo editing</u> -To explain that colours can be changed in digital images	<u>Computing systems and networks - Systems and searching</u> -To recognise the role of computer systems in our lives -To describe how search engines select results	<u>Computing systems and networks - Communication and collaboration</u> -To evaluate different ways of working together online <u>Creating media – Web page creation</u> -To recognise the implications of linking to content owned by other people
Computer networks — Understand how networks can be used to retrieve and share information, and how they come with associated risks (Information Technology)	- To identify devices I could use to access information on the internet (Project Evolve) - To give simple examples of how to find information (search engine, voice activated searching)		<u>Computing systems and networks – IT around us</u> -To recognise the uses and features of information technology -To identify the uses of information technology in the school	<u>Computing systems and networks – Connecting computers</u> -To explain how a computer network can be used to share information -To explore how digital devices can be	<u>Computing systems and networks – The Internet</u> -To describe how networks physically connect to other networks -To recognise how networked devices	<u>Computing systems and networks - Systems and searching</u> -To experiment with search engines -To describe how search engines select results -To explain how search	<u>Computing systems and networks - Communication and collaboration</u> -To explain the importance of internet addresses -To recognise how data is transferred across



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			<ul style="list-style-type: none"> -To identify information technology beyond school -To explain how information technology helps us -To explain how to use information technology safely -To recognise that choices are made when using information technology 	<p>connected</p> <ul style="list-style-type: none"> -To recognise the physical components of a network 	<ul style="list-style-type: none"> make up the internet -To outline how websites can be shared via the World Wide Web (WWW) -To describe how content can be added and accessed on the World Wide Web (WWW) -To recognise how the content of the WWW is created by people -To evaluate the consequences of unreliable content 	<ul style="list-style-type: none"> results are ranked -To recognise why the order of results is important, and to whom 	<ul style="list-style-type: none"> the internet -To explain how sharing information online can help people to work together -To evaluate different ways of working together online -To recognise how we communicate using technology -To evaluate different methods of online communication <p><u>Creating media – Web page creation</u></p> <ul style="list-style-type: none"> -To review an existing website and consider its structure -To outline the need for a navigation path -To recognise the implications of linking to content owned by other people
<p>Safety and security – Understand risks when using technology, and how to protect individuals and systems (Digital Literacy)</p>	<ul style="list-style-type: none"> To recognise that I can say ‘no’ / ‘please stop’ / ‘I’ll tell’ / ‘I’ll ask’ to somebody who asks me to do something that makes me feel sad, embarrassed or upset. To describe ways that some people can be unkind online. To identify rules that help keep us safe and healthy in and beyond the home when using technology. To identify some simple examples of my personal information (e.g. name, address, birthday, age, location). To describe the people I can trust and can share this with; I can explain why I can trust them. (all above Project Evolve) 	<p><u>Computing systems and networks – Technology around us</u></p> <ul style="list-style-type: none"> -To create rules for using technology responsibly 	<p><u>Computing systems and networks – IT around us</u></p> <ul style="list-style-type: none"> -To recognise the uses and features of information technology -To explain how to use information technology safely -To recognise that choices are made when using information technology <p><u>Data and information – Pictograms</u></p> <ul style="list-style-type: none"> -To explain that we can present information using a computer 	<p><u>Computing systems and networks – Connecting computers</u></p> <ul style="list-style-type: none"> -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 	<p><u>Computing systems and networks – The Internet</u></p> <ul style="list-style-type: none"> -To describe how networks physically connect to other networks -To evaluate the consequences of unreliable content <p><u>Creating media – Photo editing</u></p> <ul style="list-style-type: none"> -To combine images for a purpose 	<p><u>Creating media - Video production</u></p> <ul style="list-style-type: none"> -To capture video using a range of techniques 	<p><u>Creating media – Web page creation</u></p> <ul style="list-style-type: none"> -To consider the ownership and use of images (copyright)