

YEAR ONE

TERM	Autumn 1: Technology Around Us	Autumn 2: Beebots	Spring 1: Coding	Spring 2: Grouping Data	Summer 1: Digital Writing	Summer 2: Digital Painting
LEARNING OBJECTIVES	<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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> To sequence commands To create algorithms To create loops. To create loops with multiple commands. To create events To use the knowledge I have learnt 	<ul style="list-style-type: none"> 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 	<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 	<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 and on paper
NATIONAL CURRICULUM	<ul style="list-style-type: none"> recognise common uses of information technology beyond school 		<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 		<ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	
	<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. 					
TOPIC VOCAB			algorithm, debugging program, click, double-click, drag, drop, bug, program, programming, loop, repeat, event		word processor, keyboard, keys, letters, type, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, select, font, algorithm, attribute, code, code snippet, command, data, data set, debugging, decompose, information, information technology, object, program, run (execute), technology	
SKILLS FOCUS	<p style="text-align: center;">LISTENING</p> <p style="text-align: center;">Step 1: I listen to others and can remember short instructions</p>	<p style="text-align: center;">SPEAKING</p> <p style="text-align: center;">Step 1: I speak clearly to small groups of people I know</p>	<p style="text-align: center;">PROBLEM SOLVING</p> <p style="text-align: center;">Step 0 : I complete tasks by following instructions</p>	<p style="text-align: center;">AIMING HIGH</p> <p style="text-align: center;">Step – 0 : Learners know when they are finding something too difficult</p>	<p style="text-align: center;">LEADERSHIP</p> <p style="text-align: center;">Step 0: I know how I am feeling about something</p> <p style="text-align: center;">TEAMWORK</p> <p style="text-align: center;">Step 0: I work with others in a positive way</p>	<p style="text-align: center;">CREATIVITY</p> <p style="text-align: center;">Step 1 - I imagine different situations and can say what I imagine</p> <p style="text-align: center;">STAYING POSITIVE</p> <p style="text-align: center;">Step 0 - I can tell when I feel positive or negative</p>

YEAR TWO

TERM	Autumn 1: Coding	Autumn 2: Coding	Spring 1: IT Around Us	Spring 2: Pictograms	Summer 1: Digital Photography	Summer 2: Digital Music
LEARNING OBJECTIVES	<ul style="list-style-type: none"> To control a robot To sequence commands To create algorithms To create loops 	<ul style="list-style-type: none"> To create loops. To create an app for a specific purpose To understand what an event is To create a project with events To use all the knowledge I have learnt for a final piece 	<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 	<ul style="list-style-type: none"> 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 	<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 	<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
NATIONAL CURRICULUM	<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 		<ul style="list-style-type: none"> recognise common uses of information technology beyond school 		<ul style="list-style-type: none"> use technology purposefully to create, organise, store, manipulate and retrieve digital content 	
TOPIC VOCAB	algorithm, debugging program, click, double-click, drag, drop, bug, program, programming, loop, repeat, event, persistence			algorithm, attribute, code, code snippet, command, data, data set, debugging, decompose, information, information technology, object, program, run (execute), technology		
SKILLS FOCUS	<p style="text-align: center;">LISTENING</p> <p style="text-align: center;">Step 2: I listen to others and can ask questions if I don't understand</p>	<p style="text-align: center;">SPEAKING</p> <p style="text-align: center;">Step 2: I speak clearly to individuals and small groups I do not know</p>	<p style="text-align: center;">PROBLEM SOLVING</p> <p style="text-align: center;">Step 1: I complete tasks by finding someone to help if I need them</p>	<p style="text-align: center;">AIMING HIGH</p> <p style="text-align: center;">Step – 1: Learners know what doing well looks like for them</p>	<p style="text-align: center;">LEADERSHIP</p> <p style="text-align: center;">Step 1: I know how to explain my feelings about something to my team</p> <p style="text-align: center;">TEAMWORK</p> <p style="text-align: center;">Step 1: I work well with others by behaving appropriately</p>	<p style="text-align: center;">CREATIVITY</p> <p style="text-align: center;">Step 2: I imagine different situations and can bring them to life in different ways</p> <p style="text-align: center;">STAYING POSITIVE</p> <p style="text-align: center;">Step 1: I can tell when others feel positive or negative</p>

YEAR THREE

TERM	Autumn 1: Coding	Autumn 2: Coding	Spring 1: Connecting Computers	Spring 2: Branching Databases	Summer 1: Desktop Publishing	Summer 2: Stop-frame animation
LEARNING OBJECTIVES	<ul style="list-style-type: none"> To control a robot To create algorithms. To debug algorithms. To create multi-step algorithms To create art with code. To create loops. 	<ul style="list-style-type: none"> To create loops. To create sticker art. To create a flappy bird game To create a chase game To apply all the knowledge I have learnt 	<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 that 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 	<ul style="list-style-type: none"> 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 	<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 benefits of desktop publishing 	<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
NATIONAL CURRICULUM	<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 		<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 		<ul style="list-style-type: none"> 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 	
	<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 					
TOPIC VOCAB	algorithm, debugging, program, click, bug, programming, loop, repeat, event, sequencing, persistence, angle, data, graph, binary			algorithm, attribute, browser, code, code snippet, command, data, data set, debugging, decompose, information, information technology, object, program, run (execute), technology, computer network, computer system, condition, condition-controlled loop, count-controlled loop, data set, decompose, digital device, domain name, execute (run) hardware, HTML, hyperlink, infinite loop, input, input device, internet, loop, network, object, output, output device, procedure, process, property, repetition, router, selection, server, software, stored, subroutine, switch (network switch), URL, variable, web, web address, web browser, web page, website, Wi-Fi, WAP, WWW		
SKILLS FOCUS	LISTENING Step 3: I listen to others and can tell someone else what it was about	SPEAKING Step 3: I speak effectively by making points in a logical order	PROBLEM SOLVING Step 2: I complete tasks by explaining problems to someone for advice if I need	AIMING HIGH Step – 2: Learners work with care and attention to detail	LEADERSHIP Step 2: I know how to recognise others' feelings about something TEAMWORK Step 2: I work well with others by being on time and reliable	CREATIVITY Step 3 - I generate ideas when I've been given a clear brief STAYING POSITIVE Step 2 - I keep trying when something goes wrong

YEAR FOUR

TERM	Autumn 1: Coding	Autumn 2: Coding	Spring 1: The Internet	Spring 2: Data Logging	Summer 1: Photo Editing	Summer 2: Audio Production
LEARNING OBJECTIVES	<ul style="list-style-type: none"> To create algorithms. To debug algorithms. To use events to create Star Wars games To use events to create a dance party To create loops To create nested loops.. 	<ul style="list-style-type: none"> To use if statements. To use if/else statements. To create while loops To create until loops. To apply all the knowledge I have learnt 	<ul style="list-style-type: none"> 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 (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"> 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 	<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 	<ul style="list-style-type: none"> 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
NATIONAL CURRICULUM	<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 		<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 	<ul style="list-style-type: none"> 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 		
TOPIC VOCAB	algorithm, program, bug, debugging, frustrated, persistence, event, code, loop, repeat, common, conditionals, pseudocode, condition, until, while loop		algorithm, attribute, browser, code, code snippet, command, data, data set, debugging, decompose, information, information technology, object, program, run (execute), technology, computer network, computer system, condition, condition-controlled loop, count-controlled loop, data set, decompose, digital device, domain name, execute (run) hardware, HTML, hyperlink, infinite loop, input, input device, internet, loop, network, object, output, output device, procedure, process, property, repetition, router, selection, server, software, stored, subroutine, switch (network switch), URL, variable, web, web address, web browser, web page, website, Wi-Fi, WAP, WWW			
SKILLS FOCUS	LISTENING Step 4: I listen to others and can tell why they are communicating with me	SPEAKING Step 4: I speak effectively by thinking about what my listeners already know	PROBLEM SOLVING Step 4: I explore problems by creating different possible solutions	AIMING HIGH Step – 3: Learners work with pride when they are being successful	LEADERSHIP Step 3: I manage dividing up tasks between others in a fair way TEAMWORK Step 3: I work well with others by taking responsibility for completing my tasks	CREATIVITY Step 4 - I generate ideas to improve something STAYING POSITIVE Step 3 - I keep trying and stay calm when something goes wrong

YEAR FIVE

TERM	Autumn 1: Coding	Autumn 2: Coding	Spring 1: Systems and Searching	Spring 2: Flatfile Databases	Summer 1: Vector Graphics	Summer 2: Audio Production
LEARNING OBJECTIVES	<ul style="list-style-type: none"> To make multiple sprites To use events. To create loops. To create nested loops. To create a snowflake using nested loops To create functions 	<ul style="list-style-type: none"> To create functions. To create conditionals to create conditionals. To create functions. To use all my coding knowledge to create a final piece 	<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 To identify how to use a search engine 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 	<ul style="list-style-type: none"> 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 	<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 To apply what I have learned about vector drawings 	<ul style="list-style-type: none"> To explain what makes a video effective To use a digital device to 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
NATIONAL CURRICULUM	<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 		<ul style="list-style-type: none"> use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content 	<ul style="list-style-type: none"> 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 		
TOPIC VOCAB	behaviour, sprite, loop, repeat, function, call a function, declare a function, condition, conditionals, while loop, copyright, define, prepare, reflect, try			algorithm, attribute, browser, code, code snippet, command, data, data set, debugging, decompose, information, information technology, object, program, run (execute), technology, computer network, computer system, condition, condition-controlled loop, count-controlled loop, data set, decompose, digital device, domain name, execute (run) hardware, HTML, hyperlink, infinite loop, input, input device, internet, loop, network, object, output, output device, procedure, process, property, repetition, router, selection, server, software, stored, subroutine, switch (network switch), URL, variable, web, web address, web browser, web page, website, Wi-Fi, WAP, WWW		
SKILLS FOCUS	<p>LISTENING</p> <p>Step 5: I listen to others and record important information as I do</p>	<p>SPEAKING</p> <p>Step 5: I speak effectively by using appropriate language</p>	<p>PROBLEM SOLVING</p> <p>Step 4: I explore problems by creating different possible solutions</p>	<p>AIMING HIGH</p> <p>Step – 4: Learners work with a positive approach to new challenges</p>	<p>LEADERSHIP</p> <p>Step 4: I manage time and share resources to support completing tasks</p> <p>TEAMWORK</p> <p>Step 4: I work well with others by supporting them if I can do so</p>	<p>CREATIVITY</p> <p>Step 5- I generate ideas by combining different concepts</p> <p>STAYING POSITIVE</p> <p>Step 4 - I keep trying when something goes wrong, and think about what happened</p>

YEAR SIX

TERM	Autumn 1: Coding	Autumn 2: Coding	Spring 1: Communication and Collaboration	Spring 2: Introduction to Spreadsheets	Summer 1: Web Page Creation	Summer 2: 3D Modelling
LEARNING OBJECTIVES	<ul style="list-style-type: none"> To make sprites To create sprites in action To create a virtual pet project To create text and prompts To create a user input program To interact with multiple sprites 	<ul style="list-style-type: none"> To count with variables. To create a collector game To create a simulation To learn how AI works To use all my knowledge of coding for final piece 	<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 	<ul style="list-style-type: none"> 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 	<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 	<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
NATIONAL CURRICULUM	<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 		<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 	<ul style="list-style-type: none"> 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 		
TOPIC VOCAB	behaviour, sprite, loop, repeat, function, call a function, declare a function, condition, conditionals, while loop, copyright, define, prepare, reflect, try, user, prompt, variable, simulations, machine learning			algorithm, attribute, browser, code, code snippet, command, data, data set, debugging, decompose, information, information technology, object, program, run (execute), technology, computer network, computer system, condition, condition-controlled loop, count-controlled loop, data set, decompose, digital device, domain name, execute (run) hardware, HTML, hyperlink, infinite loop, input, input device, internet, loop, network, object, output, output device, procedure, process, property, repetition, router, selection, server, software, stored, subroutine, switch (network switch), URL, variable, web, web address, web browser, web page, website, Wi-Fi, WAP, WWW		

<p>SKILLS FOCUS</p>	<p>LISTENING <u>Step 6-</u> <u>I show I am listening by how I use eye contact and body language</u></p>	<p>SPEAKING <u>Step 6: I speak effectively by using appropriate tone, expression and gesture</u></p>	<p>PROBLEM SOLVING <u>Step 5 - I explore problems by thinking about the pros and cons of possible solutions</u></p>	<p>AIMING HIGH <u>Step 5 -</u> <u>I set goals for myself</u> <u>CLICK TO BUILD IT</u></p>	<p>LEADERSHIP <u>Step 5-</u> <u>I manage group discussions to reach shared decisions</u></p> <p>TEAMWORK <u>Step 5-</u> <u>I work well with others by understanding and respecting diversity of others' cultures, beliefs and backgrounds</u></p>	<p>CREATIVITY <u>Step 6- I use creativity in the context of work</u></p> <p>STAYING POSITIVE <u>Step 5- I keep trying when something goes wrong and help cheer others up</u></p>
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