Computing - Curriculum Overview
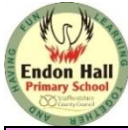
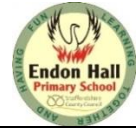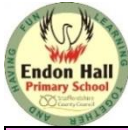| Year	Subject specific Vocabulary	'The Greats'	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery			**Understanding the World:** Technology • Knows how to operate simple equipment, e.g. turns on CD player, uses a remote control, can navigate touch-capable technology with support • Shows an interest in technological toys with knobs or pulleys, real objects such as cameras, and touchscreen devices such as mobile phones and tablets • Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images • Knows that information can be retrieved from digital devices and the internet • Plays with a range of materials to learn cause and effect, for example, makes a string puppet using dowels and string to suspend the puppet					
Reception	Ipad Computer Photo Video Internet Type Keyboard Mouse Screen Phone Whiteboard		**Understanding the World:** Technology • Completes a simple program on electronic devices • Uses ICT hardware to interact with age appropriate computer software • Can create content such as a video recording, stories, and/or draw a picture on screen • Develops digital literacy skills by being able to access, understand and interact with a range of technologies • Can use the internet with adult supervision to find and retrieve information of interest to them					

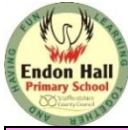| Year 1 | Instructions, algorithm, sequenced, ordered, step-by-step, clockwise, anti-clockwise, quarter turn, program, debug, direct, clear, sequence

Trackpad, click, double click, launch, minimize, taskbar, folder, save, save as,

Uppercase, lowercase, Caps lock, shift, space bar, save, icon, edit, backspace, delete, arrow keys, undo, redo

Brush, select, cursor, drag, hold, fill, shape, undo, redo, text, insert, format, share

Search, internet, key word | Walt Disney | **Programing - Programming toys**
-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.

-look at household technology-
-recognise common uses of information technology beyond school. | **Computer Skills**
-use the trackpad, switch on/off, save

-use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Word -**
-put text on screen
-use upper and lower case
-use the space bar
-use the Shift
-use Caps lock
-use undo and redo

-use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Graphics and Design - Paint**

-Basic skills, brush, fill, shapes

-use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Internet Research**

-Key word search

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

Presentation-Word, Publisher, PowerPoint

-Create information document- famous people

-use technology purposefully to create, organise, store, manipulate and retrieve digital content |

| Year 2 | Information, presentation, insert, font, copy, paste,

Fill, colour, tool bar, computer program, shape tool,

Code, instructions, program, algorithm,

Undo, redo, select, bold, highlight, italic, drag, underline, font, size, snipping tool, print screen, copy, paste

Program, code, script, algorithm, repeat, event, variable, commands,

Search, internet, key word | Nick Park | **Presentation- PowerPoint**

-Basic skills, insert slides, copy and paste pictures

-use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Graphics and Design - Paint**

-create work from other artists

-use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Programing - Logo**

-Basic shapes

-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 | **Word**

-know that text can be saved and retrieved
-change the font style
-change the font size
-change the font colour
-print their work using the Print icon
-use the cursor (arrow) keys for simple on screen editing
-with support, import graphics and add text

-use technology purposefully to create, organise, store, manipulate and retrieve digital content | **Programming Scratch**

-Beginning with basics, adding a sprite, moving a sprite,

-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 | **Internet Research**

-search terms for children

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

Presentation- Word, Publisher, PowerPoint

-create information document- famous people

-use technology purposefully to create, organise, store, manipulate and retrieve digital content |
| Year 3 | Copy, paste, insert, font, solid fill, background

Computer program, fill, shade, shade, retrieve, file, save, | Larry Page | **Presentation - Powerpoint**

-format and design slides/backgrounds

-select, use and combine a variety of | **Graphics and Design -Paint**

-new tools
-using and manipulating objects | **Programming - Logo**

-pen up/pen down

-design, write and debug | **Word**

-select text and change the font style, size and colour | **Programming - Scratch**

-more complex scripts | **Internet research and communication**

-Search results

-understand computer networks including the internet; how they |

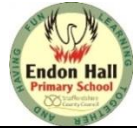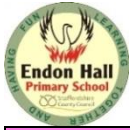|								
	save as, transparent colour, Repeat, program, code, algorithm, debug, regular, angle Screenshot, manipulating windows, copy, paste, uppercase, lowercase, align, bullet points, numbering, shortcut, select, text Create, command, algorithm, polygon, debugging, repeating pattern, Web search, search engine, order		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	-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	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	-select text and use Bold and Underline icons -use the scroll bars to view different parts of the document justify / align text -import graphics and add text -print using the menu -use print preview -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	-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	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 **Presentation – Word, Publisher, PowerPoint** -create information document- famous people -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

| Year 4 | Slide, insert, font, background, solid fill, gradient fill

Animation, frame, scene,

Procedure, algorithm, code, setpos, coordinates, random, fill, repeat

Edit, copyright, format, table, inset, column, row, cell, layout, orientation, portrait, landscape,

Visual, decomposing, algorithm, debugging, sequence, selection, effective, sprite, repetition, commands, variable, sounds library, assign, numerical values, positive, negative, appropriate,

Returned results, trustworthy, spam, rank, URL | Bill Gates | **Presentation - PowerPoint**

-inserting web links
-backgrounds

-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 | **Graphics and design**

-pivot Animation

-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 | **Programming - Logo**

-repeat, pen colour

-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 | **Word**

-import graphics (position and align
-use the spell checker
-use Find, search and replace if appropriate
-use Page Setup to choose Portrait or Landscape page as appropriate
-learn how to insert and use a simple table
-use the Zoom menu to view the whole page

-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 | **Programming - Scratch**

-questions and quizzes

-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 | **Internet research and communication**

-order of returned results

-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

Presentation - Word, Publisher, PowerPoint

-create information document- famous people

-select, use and combine a variety of software (including |
|---|---|---|---|---|---|---|---|

					algorithms and programs	goals, including collecting, analysing, evaluating and presenting data and information		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
Year 5	Design, background,

Design, architectural designs, interior designs, landscape, Computer program, 3D,

Input, output, record, skip to start, skip to end, playback, jingle, podcast, download, advert/advertising, present, evaluate,

Insert, document, open, text box, font, align,

Sprite, backdrop, trigger, action, effects, | **Steve Jobs** | **Presentation – PowerPoint**

-practise skills, hyperlinks, actions, transitions

-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 | **Graphics and design**

-sketch up

-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, | **Radio stations**

-create and import sounds.

-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 | **Publisher**

-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 | **Programming – Scratch**

– create own video game

-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 | **Internet research and Communication**

-design own web page

-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 |

	consequence, obstacle, code, costume, duplicate, variable, debug, Bookmarks, favourites			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	evaluating digital content **Presentation - Word, Publisher, PowerPoint** -create information document- famous people -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

Year 6	Hyperlink, link, transition, animation, action	Mark Zuckerberg	Presentation - PowerPoint	Graphics and design	Programming - Kodu	Excel	Programming - Scratch	Internet research and communication
	Animation, frame, scene, stop motion		-transitions, animation, links, actions	-stop motion	-create own world/game	-spreadsheets	-animated stories	-communication online
	Icon, visual programming, investigate, code, instructions, genre, virtual world, tool pallet, deconstruct, end goal, start point, end point, program design, compete, automatically controlled,		-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	-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	-design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	-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	-design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	-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
	Spreadsheet, format, cell, formula, calculate, toolbar, axis, conditional,				-use sequence, selection, and repetition in programs; work with variables and various forms of input and output		-use sequence, selection, and repetition in programs; work with variables and various forms of input and output	-use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
	Animate, sprite, repeat, broadcast, receive, reflected, horizontal, code, deconstruct, sequence, backdrop, transition, audio, enhance, interactive,				-use logical reasoning to explain how some simple algorithms work and to detect and correct errors in		-use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	**Presentation - Word, Publisher, PowerPoint** -create information document- famous people
	Online commination,							-select, use and combine a variety of software (including

	Online audience, posting				algorithms and programs		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