

NORTHWICK MANOR PRIMARY SCHOOL

Knowing more, remembering more.....connecting learning.....

Computing Curriculum Overview

Intent:

Bill Gates began his company Microsoft in a garage with nothing but a dream, his skills and a determination to change the world. Northwick Manor Primary School's computing curriculum will; open children's eyes to **aspire** to greatness, fill their hearts with the **power** to effect global change, will prick the spurs of their **ambition** and grant them the knowledge and skills to **achieve** greatness. We strive to give children a broad range of experiences that satisfy the curiosity and interest children have in the subject. Children are able to use a range of devices and software packages to broaden their knowledge and hone their skills.

The computing curriculum does not take place in an isolated bubble but is seated firmly within a context that gives purpose, meaning and connections to learning in other areas. One example of this is the Year 2 topic which gives children the skills to create work in the style of an artist they have studied in art. **Pupil power** plays a significant role in computing lessons to ensure that the learning context remains relevant and brings learning to life.

Computing allows children the chance to look to the future and learn the skills that place them favourably in it. By offering children high-quality lessons in coding, programming and problem solving we are preparing them for all types of work in a technologically advanced civilisation. The **aspirations** that children have can be harnessed more directly in computing lessons than other curriculum areas as they recognise the importance of computing in their daily and future lives.

Ambition can drive humans to excellence. As we discover more about the giants in the computing world from times past we also throw down the gauntlet for children to achieve more in the future. Often, we use current day examples like NASA's Mars Rover and ask who will be responsible for the next leap forward in innovation and strive ever forwards. We aim to set the children's **ambitions** as high as the stars and as far as Mars.

Once an aim is set, children need someone to help them progress towards it. In Northwick Manor we have teachers with subject-specific qualifications and interest in computing to allow children the **opportunity** to achieve the lesson objectives and a richer understanding overall. Year on year the skills are built upon and improved so that by the end of Year 6 we have learners who are, for example, well prepared to: conceptualise, plan, code and de-bug programs. We aim to allow children **opportunities** to achieve their goals to our high-standards.

In line with the National Curriculum for Computing, we provide a high-quality computing education which equips children to use computational thinking and creativity to understand and change the world. The curriculum will teach children key knowledge about how computers and computer systems work, and how they are designed and programmed. Learners will have the opportunity to gain an understanding of computational systems of all kinds, whether or not they include computers. Children will learn to collect and analyse data so the information can be presented in a clear and useful manner. They will also make design decisions to plan, implement and refine the presentation of facts and information. All of this will be completed in the context of and with a solid foundation in staying safe online. Children must know how to navigate the internet safely, deal with unacceptable behaviour online and how their digital reputation and footprint can affect them. By the time they leave Northwick Manor, children will have gained key knowledge and skills in the three main areas of the computing curriculum:

- **Computer Science:** The study of the hardware, software, networking, and processes that give life to a machine to enable it to perform complicated tasks and actions such as coding a Math's quiz and a platform game.
- **Digital Literacy:** Learning to use technology appropriately and responsibly to survive and thrive in the digital world. It is at the forefront of all lessons and is embedded through classwork and e-safety days throughout the year.
- **Information Technology:** Information Technology and Digital Literacy. These units are designed for children to solve problems with the aid of technology: for instance, designing a new playground and making a story come to life through animation.

KS1 National Curriculum Aims:


KS1 Pupils should be taught to:

- α Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- α Create and debug simple programs
- α Use logical reasoning to predict the behaviour of simple programs
- α Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- α Recognise common uses of information technology beyond school
- α 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.

KS2 National Curriculum Aims:

KS2 Pupils should be taught to:

- Ω design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts
- Ω use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- Ω use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- Ω 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
- Ω use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Ω 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
- Ω 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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Key Learning: What will pupils get better at?							
	EYFS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
AUTUMN 1	Computer Safari IT DL Discover what a computer is, where we find them and understanding they need to be programmed.	Beebot Explorers IT Learn to control a BeeBot by sequencing algorithms and predicting the program outcomes.	Fundamentals in Coding DL Explore computational thinking skills such as decomposition and sequencing in different programming languages.	Sequencing sounds CS Create sequences in a blockbased programming language (Scratch) to make music using	Cryptography unit CS Explore how computers interpret data from Binary and how the invention of the very first computer has impacted the world.	Audio engineers CS Be able to remix, edit and record audio to create a radio jingle to promote climate change.	3D modelling IT Create a 3D model of a keyring by using CAD design software to promote a local business. Use formulas in a spreadsheet to calculate cost and profit.
Key Golden Nuggets							
What do we want pupils to know and what do we want pupils to be able to know how to do by the end of this unit?							
	<ul style="list-style-type: none"> ✓ To know the basic parts of a computer, e.g. mouse, screen, keyboard. ✓ To know there are different types of computers (iPads, laptops, game consoles) 	<ul style="list-style-type: none"> ✓ To know that we control computers by giving them instructions. Algorithms ✓ To know and write a simple algorithm. ✓ To order a sequence. ✓ To program a Beebot to follow a specific path. ✓ To predict the outcome of a simple algorithm or program. 	<ul style="list-style-type: none"> ✓ To know that computers need programs to achieve a specific goal. ✓ To know programs, execute by following precise and unambiguous instructions. ✓ To know there are different coding languages. ✓ To know decomposition is breaking down problems into smaller parts. ✓ To know an algorithm is a precise set of instructions. ✓ To know loops, make our code more efficient. ✓ To know how to use a forever loop. 	<ul style="list-style-type: none"> ✓ To know decomposition is breaking down problems into smaller parts. Algorithms ✓ To know how to change sprites and backgrounds in Scratch. ✓ To explain that the order of commands can affect the outcome. ✓ To create a sequence of commands. ✓ To know there are different computing languages. 	<ul style="list-style-type: none"> ✓ To know computers, work on the binary system (0, 1) ✓ To know binary can represent letters, pictures and sound. ✓ To know and be able to order different file sizes (kb, mb, gb, tb). Impact ✓ To know one of the very early computers was the enigma machine and the impact it had. ✓ To know that computers have changed over time and the impact they have. 	<ul style="list-style-type: none"> ✓ To know how to use a digital device to record a sound. ✓ To know how to playback a recording. ✓ To know how to select an audio clip and apply effects. ✓ To know how to edit an audio clip by trimming. ✓ To know how to layer audio samples. ✓ To know how to delete a section of audio. ✓ To know how to save/export an audio file. 	<ul style="list-style-type: none"> ✓ To know how to modify a 3D object in a computer programme by: <ul style="list-style-type: none"> o Repositioning o rotating in three dimensions o resizing o recolouring o duplicating o deleting ✓ To know what a spreadsheet is and its function. ✓ To explain that formula can be used to produce calculated data.
Connecting Learning							
		EYFS: A Better Planet	Year 1: Digital Painting	Year 1: Technology Around us	Year 3: Be Internet Smart Year 1: Technology Around us	Year 4: Be Internet Alert Year 3: Be Internet Smart Year 1: Technology Around us	Year 5: Real or Fake Year 4: Be Internet Alert Year 3: Be Internet Smart Year 1: Technology Around us
AUTUMN 2	Sequencing CS Breaking down popular stories into individual elements. Gain an understanding of the term Algorithm and explore the order we need to follow when planting a seed.	Digital Painting DL IT CS Choose appropriate tools in a program to create art by combining shapes to plan a playground and design their own emoji.	Art attack IT DL Explore how to capture and manipulate shapes and images using different art packages.	Be Internet Smart DL IT Learn how to be internet smart by exploring what information we should share but also keep private on the internet.	Repetition in Shapes CS IT Use a block-based programming language to explore count-controlled loops when drawing shapes.	Real or Fake DL IT Explore how we shouldn't trust everything we read on the internet. Evaluate different websites to investigate whether they are trustworthy or not, before hacking and adapting your own to see if you can fool your friends.	Variables in Games IT DL CS Utilise variables when designing and coding a game in a programming language.

Key Golden Nuggets

What do we want pupils to know and what do we want pupils to be able to know how to do by the end of this unit?



<ul style="list-style-type: none"> ✓ To know that we control computers by giving them instructions. ✓ To know instructions must be in an order. 	<ul style="list-style-type: none"> ✓ To know digital content can be images, text, video or audio. ✓ To know how to use basic drawing tools on a computer (brushes, colour, brush thickness). ✓ To know how move and rotate shapes on a computer. ✓ To know how to combine pictures, text and drawings on a computer. ✓ To know which software to use for a given outcome (ie. Drawing software) Digital Literacy To know that digital content belongs to the person who created it. 	<ul style="list-style-type: none"> ✓ To know how to take a photograph. ✓ To know how to zoom in and out, to focus and review photographs taken. ✓ To know editing an image changes its appearance. ✓ To know not all images are real and can be trusted. ✓ To know how to edit, resize and apply a filter to an image. ✓ To know how to combine images, text and pictures. Digital Literacy ✓ To know what my personal information is. ✓ To know why we keep personal information private. 	<ul style="list-style-type: none"> ✓ To know computers can be used for communication (video calls, text messages). Impact ✓ To know who to talk to if they are worried or concerned about something they have seen online. ✓ To know that not all information online is true. ✓ To know what personal information is and that we should not share it online. ✓ To know the difference between fact and opinion. 	<ul style="list-style-type: none"> ✓ To know a loop command in a program can be used to repeat instructions. ✓ To know a count-controlled loop stops after a specific number of times. ✓ To know there are different coding languages. ✓ To be able to design a program for a purpose. ✓ To be able to identify patterns in code. 	<ul style="list-style-type: none"> ✓ To know what a hoax is. ✓ To know the difference between online misinformation (inaccurate information distributed by accident) and disinformation (inaccurate information deliberately distributed and intended to mislead). ✓ To know what information to keep private. ✓ To know why someone else might change their identity depending on what they are doing online (e.g. gaming; using an avatar; social media). ✓ To know different strategies to be discerning in evaluating digital content (ie. checking the user's email address; knowing which sources are trustworthy). ✓ To know websites are built on HTML. <p>To know what makes a strong password.</p>	<ul style="list-style-type: none"> ✓ To know a program variable is a placeholder in memory for a single value. ✓ To know that variables can hold numbers (integer or letters (strings)). ✓ To know how to write and implement a variable in a computer program (i.e. to keep score).
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Connecting Learning

	EYFS: Sequencing	Year 1: BeeBots	Year 2: Communicating	Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots	Year 4: Repetition in Shapes Year 4: Repetition in Games Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots	Year 4: Top Trumps Year 3: Animation Year 2: Art Attack Year 1: Digital Painting
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SPRING 1	<p style="text-align: center;">True & False</p> <p style="text-align: center;">IT DL</p> <p>Should we believe everything we see online? Create your background pictures using a paint package. Use green screen technology to appear in the picture.</p>	<p style="text-align: center;">Just Dance</p> <p style="text-align: center;">CS</p> <p>Plan your own dance moves and explore whether you can follow each other's instructions. Understand the benefit of loops</p>	<p style="text-align: center;">Robot algorithms</p> <p style="text-align: center;">CS</p> <p>Write, plan, sequence and debug algorithms, in both using a robotic device (Beebot) and a block-based coding language (Scratch Jnr).</p>	<p style="text-align: center;">Events and actions in programs</p> <p style="text-align: center;">IT DL</p> <p>Write algorithms and programs that use a range of events to trigger sequences of actions.</p>	<p style="text-align: center;">Be Internet Alert</p> <p style="text-align: center;">DL IT</p> <p>Follow Google's new digital literacy curriculum which uses classroom and online activities to teach 5 fundamental pillars for safe and productive internet use.</p>	<p style="text-align: center;">Selection in Quizzes</p> <p style="text-align: center;">IT CS</p> <p>Use a block-based programming language to selection by coding a quiz.</p>	<p style="text-align: center;">Company Launch</p> <p style="text-align: center;">IT DL</p> <p>Within this unit the children will create a website for a new bakery that is opening in town. Explore how to create a positive profile, USP and how to use online communities to bring customers into the shop. Discuss dealing with negative comments and exploring who owns online content.</p>
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Key Golden Nuggets

What do we want pupils to know and what do we want pupils to be able to know how to do by the end of this unit?



	<ul style="list-style-type: none"> ✓ To know how to take a picture. ✓ To know how to review a picture I have taken. ✓ To interact with computer inputs (touchscreen, keyboard or mouse). ✓ To know who to talk to when we are scared or worried about something we have seen on a computer or tablet. 	<ul style="list-style-type: none"> ✓ To explain that we control computers by giving them instructions. ✓ To know a loop repeats a set of codes. Algorithms ✓ To know how to write a simple algorithm. ✓ To order a sequence accurately. ✓ To know there are different coding languages. ✓ To know how to debug errors in code. ✓ To predict the outcome of a simple algorithm or program. 	<ul style="list-style-type: none"> ✓ To know that computers need programs to achieve a specific goal. ✓ To know programs, execute by following precise and unambiguous instructions. ✓ To know there are different coding languages. 	<ul style="list-style-type: none"> ✓ To know decomposition is breaking down problems into smaller parts. ✓ To know how to change sprites and backgrounds in Scratch. ✓ To explain that the order of commands can affect the outcome. ✓ To create a sequence of commands. ✓ To know that there are different events (ie. when sprite is touched/when green flag is clicked) to run a script. ✓ To know how to combine event, move and pen scripts to program a sprite. 	<ul style="list-style-type: none"> ✓ To know not all information on the internet is trustworthy. ✓ To know some of the risks of sharing photos, videos and comments publicly. ✓ To know who to contact when they are concerned. ✓ To know that phishing emails try to catch users out by installing spam or getting them to reveal personal information. ✓ To know what chatbots are. ✓ To know how to identify suspicious text messages, emails and social media posts online. 	<ul style="list-style-type: none"> ✓ To know a loop can be stopped when a condition is met. ✓ To know conditions in computing allows the programme to flow in different directions. ✓ To know how to use a condition in and if ... then... statement to produce a given outcome. ✓ To know how to read code to predict its outcome. 	<ul style="list-style-type: none"> ✓ To know a spreadsheet holds data. ✓ To know formulas can be used to produce calculated data. ✓ To know how to find, search and sort data in a spreadsheet. ✓ To know how to use simple formulas in a spreadsheet. ✓ To know how to create a prototype app by: <ul style="list-style-type: none"> o Changing file dimensions o Adding images, text and video o Using hyperlinks. ✓ To know the key features in a design process when creating content (e.g. identify problem, plan, create, evaluate, share).
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Connecting Learning

			Year 1: Just Dance	Year 1: Just Dance Year 2: Robot Algorithms Year 1: Beebots	Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots	Year 4: Repetition in Shapes Year 4: Repetition in Games Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots	Year 4: Top Trumps
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SPRING 2	Input & Outputs CS Explore a variety of inputs and outputs.	Clean water IT DL Plan, design and create your own drinks labels with the aid of a computer.	Investigators CS Plan and run an investigation by collecting data from a variety of sources and presenting it in pictograms and charts.	Big Bird Watch IT CS Collect, organise and sort data in a database and use simple graphs and formulae to make calculations.	Top Trumps CS IT Create your own mythical underwater animal using image editing software to combine and modify images. Enter data on a database to compare creature features.	Computing Influencers IT Explore how we research and check information online is accurate before creating an eBook all about key influencers in computing and the impact they have had on the world.	Be Internet Kind and Brave DL IT Explore how to be kind on the internet as well as how to report people or sites when things do not go to plan.
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Key Golden Nuggets

What do we want pupils to know and what do we want pupils to be able to know how to do by the end of this unit?





	<ul style="list-style-type: none"> ✓ To interact with computer inputs (touchscreen, keyboard or mouse). ✓ To use a mouse or a touch screen to move an image. ✓ To use a mouse or a touchscreen for mark making. 	<ul style="list-style-type: none"> ✓ To use letters, number, and space keys on a keyboard. ✓ To know how to change the appearance of shapes on a computer (colour and size). ✓ To know how to take a photo. ✓ To know how to combine images, text 	<ul style="list-style-type: none"> ✓ To know what data is. ✓ To know tally charts can be used to collect data. ✓ To know can view data in different formats such as pictograms and charts. ✓ To know how to read a tally chart. 	<ul style="list-style-type: none"> ✓ To know data can be searched, filtered and filtered. ✓ To know how to find information in a branching database. ✓ To know a branching database is a tree structure. 	<ul style="list-style-type: none"> ✓ To use a computer to open and retrieve a file. ✓ To know which software is best for image editing. ✓ To know how to edit an image by: <ul style="list-style-type: none"> ✓ Rotating ✓ Flipping ✓ Cropping ✓ Removing the background 	<ul style="list-style-type: none"> ✓ To know how technology has changed over time. ✓ To understand the positive and potentially negative impact technological changes have had on society. ✓ To know who Alan Turing is and the impact he had in the invention of the Colossus machine. 	<ul style="list-style-type: none"> ✓ To know what cyberbullying is and the impact it can have on others. ✓ To know who to contact when they are concerned. ✓ To know how to use the internet to communicate positively (i.e. video calling friends and family).
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		and shapes to produce new digital content. ✓ To know a computer stores information and that it can be edited using different software.	✓ To know how to create a pictogram using a computer.	✓ To know how computers are used to collect, store and retrieve data.	<ul style="list-style-type: none"> ✓ <i>Cut a part out</i> ✓ <i>Adjusting colours</i> ✓ <i>Applying filters</i> ✓ <i>Adding effects.</i> ✓ <i>To know how to add to an image by adding:</i> ✓ <i>Text</i> ✓ <i>Annotation / drawing</i> ✓ <i>An element (ie. Border).</i> ✓ <i>To know what copyright is.</i> 	✓ To know the key advancements in computing over the last century.	✓ To recognise what is acceptable and unacceptable behaviour on the internet.
Connecting Learning							
				Year 2: Investigators	Year 3: Animation Year 2: Art Attack Year 1: Digital Painting	Year 2: Computer Museum	Year 5: Crab Maze Year 4: Repetition in Shapes Year 4: Repetition in Games Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots

SUMMER 1	BeeBot Explorers CS Input a sequence of instructions to control a device.	Tree surgeons CS Survey the variety of trees around school then use them to sort and group records into a branching database.	Computer museum IT DL Understand and discover the impact of technology on the world and identify how it helps us by collating a museum of old hardware, including phones, laptops, and tablets.	Animation IT DL Explore different types of animation before planning a storyboard and creating stoptime animation.	Repetition in Games CS IT Use a block-based programming language to explore controlled and infinite loops when creating a game.	Crab maze CS Use a block-based programming language to explore selection and variables when creating their own game.	Tick Tock CS Exploring flowcharts, broadcasts and variables. Sphero Plan, code and control a physical computing robotic around a series of challenges by using conditionals, loops, and variables.
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Key Golden Nuggets
What do we want pupils to know and what do we want pupils to be able to know how to do by the end of this unit?

	<ul style="list-style-type: none"> ✓ To know that we control computers by giving them instructions. ✓ To know instructions must be in an order. ✓ To input instructions on a robotic device. ✓ To know an algorithm is a precise set of instructions. 	<ul style="list-style-type: none"> ✓ To know what data is. ✓ To know data can be represented as pictograms. ✓ To search and search for data in a branching database. ✓ To know how to combine images, text and shapes to produce new digital content. 	<ul style="list-style-type: none"> ✓ To know the key components of a computer and what they are used for (i.e. input information into the computer > keyboard, mouse touch). Impact ✓ To know that computers have adapted and evolved over time. ✓ To know computers are used for different purposes. Communication ✓ To know that you can use the internet to search for information. 	<ul style="list-style-type: none"> ✓ To know the difference between stop-time, flipbook, 2D and 3D animation. ✓ To know stop-time animation is a series of frames of images. ✓ To know how to capture a series of images to create a stop time animation. ✓ To know how to add text and sound to an animation. ✓ To know how to export an animation to a film. 	<ul style="list-style-type: none"> ✓ To know a loop command in a programme can be used to repeat instructions. ✓ To know a forever loop repeats instructions until the program is stopped. ✓ To know a count-controlled loop stops after a specific number of times. ✓ To know how to change sprites and backgrounds in Scratch. ✓ To be able to identify patterns in code. 	<ul style="list-style-type: none"> ✓ To know a loop can be stopped when a condition is met. ✓ To know conditions in computing allow the programme to flow in different directions. ✓ To know how to use a condition in and if... then... statement to produce a given outcome. ✓ To know that variables hold data (numbers or text) and can be used for keeping scores. Computational Thinking ✓ To know how to read code to predict its outcome. 	<ul style="list-style-type: none"> ✓ To know a program variable is a placeholder in memory for a single value. ✓ To know that variables can hold numbers (integers) or letters (strings). ✓ To know how to write and implement a variable in a computer programme (i.e. to keep score). ✓ To know computer algorithms can be triggered by sensor inputs (when it is dark / when robot hits). ✓ To know how to code a robot around a specific path using a block coding language.
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Connecting Learning							
				Year 2: Art Attack Year 1: Digital Painting	Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots	Year 4: Repetition in Shapes Year 4: Repetition in Games Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots	Year 5: Crab Maze Year 4: Repetition in Shapes Year 4: Repetition in Games Year 3: Events and actions in programs Year 2: Robot Algorithms Year 1: Beebots
SUMMER 2	A Better Planet IT DL Using creative tools, including photography and video, children explore the world around them capturing it on Digital Devices.	Technology around us IT DL Identify the different types of technology around them and the impact it has on their daily lives.	Communicating IT DL Explore how we use IT to communicate with people from around the world from using video calls to emails. Learn what information should we share online.	Connecting Computers CS Know that digital device has inputs, processors and outputs and how devices can be connected to make networks.	How does the internet work? IT CS Know that the internet is a global network of computers, servers and routers that are interconnected.	Visual Storytelling CS Plan, record, remix and edit a video to create a powerful visual story about the impact of global warming.	What is inside a Computer? CS IT Explore the components of a computer and consider the impact of technology and what future it has in the world around us.
Key Golden Nuggets							
What do we want pupils to know and what do we want pupils to be able to know how to do by the end of this unit?							
	<ul style="list-style-type: none"> ✓ To know how to take a picture and video. ✓ To move and rotate shapes. ✓ To use a mouse or a touchscreen for mark making. ✓ To add text to a document. 	<ul style="list-style-type: none"> ✓ To know different computer inputs: mouse, keyboard, touch, webcam. ✓ To know different computer outputs: sound, screen. ✓ To know what a computer is. 	<ul style="list-style-type: none"> ✓ To know computers can be used for communication (video calls, text messages). ✓ To know what personal information is and that we should not share it online. ✓ To know that not all information online is true. ✓ To know who to talk to if they are worried or concerned about something they have seen online. 	<ul style="list-style-type: none"> ✓ To know that a network is a series of computers connected. ✓ To know computers can be connected wirelessly and wired. ✓ To recognise the physical components of a network (computer, switch, server) Impact and Communication ✓ To know a computer network can be used to share information. 	<ul style="list-style-type: none"> ✓ To know that a network is a series of computers connected. ✓ To know computers can be connected wirelessly and wired. ✓ To recognise the physical components of a network (computer, switch, server). ✓ To know that the internet allows us to view the World Wide Web. ✓ To know where websites are stored when uploaded to the World Wide Web. ✓ To know a computer network can be used to share information. ✓ To know there are copyright rules to protect online content. ✓ To know not all information on the internet is trustworthy. 	<ul style="list-style-type: none"> ✓ To know video as moving pictures combined with audio. ✓ To use a computer to capture a video by demonstrating how to: <ul style="list-style-type: none"> o Start and stop a recording o How to pan o How to focus and zoom o How to use special effects such as green screen. ✓ To use a computer to edit a video by demonstrating how to: <ul style="list-style-type: none"> o Locate a recording and play it back o Add multiple clips to a timeline o Trim clips to the desired length o Delete a section of video o Apply special effects including sound and text o Add a voice over o Save and export a video file. 	<ul style="list-style-type: none"> ✓ To know what the key components of a computer is and their role (RAM, Hard drive, Screen, Mouse, Keyboard, GPU, CPU). ✓ To know that the internet allows us to view the World Wide Web. ✓ To know the different types of media that can be communicated through the internet. ✓ To know that search engines produce different results. ✓ To identify those results from a search engine can include targeted adverts.
Connecting Learning							
		EYFS: A Better Planet	Year 1: technology Around us	Year 2: Communicating Year 1: Technology Around us EYFS: A Better Planet	Year 3: Connecting Computers Year 2: Communicating Year 1: Technology Around us EYFS: A Better Planet	Year 3: Animation Year 2: Communicating	Year 3: Connecting Computers Year 2: Communicating Year 1: Technology Around us EYFS: A Better Planet