

All Saints CE Primary School and Nursery

Computing Curriculum-Progression in Knowledge and Skills

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	What is a keyboard and how does it work?	What is a mouse and how does it work?	What is an instruction?	What is a camera and how does it work?	How do you make things move?	How can we compare?
Ongoing: Loose parts play Able to follow safe internet rules at school Texts: Digi duck and Smartie the penguin Recognise some technology that is used in familiar places e.g. home, school, shops Use technology appropriately through role play	Exploring how things work- Keyboards and mouse control. Online Safety- I understand my own body is mine and that I can say no in real life or online I know that we have rules to keep us safe both in and beyond the home	Using a mouse to click and drag. Online Safety- I can talk about some ways that the internet can be used to communicate	Following instructions Giving simple instructions Dressing up instructions Debugging Online Safety- I know I can put information on the internet	Exploring hardware Real world tinker tray Pictures of play Picture walk Class photo album Online Safety- I know some people can be unkind online	Understanding arrows Introducing Bee-bot Programming Bee-bot: Explore what happens when individual buttons are pressed on robots/floor robots Online Safety- I know I can use the internet to find things out	Sorting ourselves Yes or no questions? Exploring pictograms Online Safety- I can talk about some simple examples of my personal information. I know the people I can trust and share this with. I know that work I create is mine and I can name my work.
Vocabulary	Computer, monitor, keyboard, type, mouse, move, click, letters, numbers, safe, online, computer, phone,	Mouse, left click, right click, click, move, drag, arrow, drop, communicate, internet, safe	Instructions, step over, walk around, turn, left right, side, straight on, stop, stand, under, walk, hop, run, describe, two-part instruction, safe, information, name, address	Mouse, buttons, keyboard, keys, monitor, speaker, click, open, shut, technology, battery, push, twist, on, off, camera, IPad, tablet, lens, point, shoot, picture, photograph, photographer,	Forward, backward, right, left, arrow, direction, turn, straight on, directions, program, instructions, back, circle, arrow, sequence, information, research, find	Sort, group, describe pattern, colour, size, height, more, less, count, in total, graph, column, row, square, data, collect, record, most popular, least popular,
Misconceptions	A mouse is an animal.	Where is left and right? What is a click?	Instructional vocab eg forward and backwards.	You can only use a phone to take a photo.	Instructional vocabulary what does left and right mean?	
Reception	How do you keep yourself safe online?	Can you use a computer?	Can you follow instructions to make a programme?	Can you operate electrical equipment/hardware?	Can you make a BeeBot move?	What is data?

<p>Online Safety taught throughout the year. Able to follow the SMART rules at school. Texts: Digi Duck and Smartie the Penguin Use the OSBOX resources. Logging onto the computers and accessing Purple Mash/Kapow.</p>	<p>Online Safety. To learn about the internet and it's uses. To learn about how to be safe on the internet. To learn about what to do when they feel unsafe online.</p>	<p>Name and use a keyboard and mouse with developing control. To learn how to log onto a Computer. To log onto the computer independently.</p>	<p>Uses ICT hardware to interact with age-appropriate computer software. Can use a range of Technology for different purposes.</p>	<p>To explore and explain how things work/knows how to operate simple equipment. Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. To be able to take a photograph.</p>	<p>Completes a simple program on a computer. To program BeeBots to follow a set route.</p>	<p>Knows that information can be retrieved from computers and other sources.</p>
<p>Core Vocabulary</p>	<p>Computer, monitor, keyboard, type, mouse, move, click, letters, numbers, safe, online, computer, phone,</p>	<p>Mouse, left click, right click, click, move, drag, arrow, drop, communicate, internet, safe</p>	<p>Instructions, step over, walk around, turn, left right, side, straight on, stop, stand, under, walk, hop, run, describe, two-part instruction, safe, information, name, address</p>	<p>Mouse, buttons, keyboard, keys, monitor, speaker, click, open, shut, technology, battery, push, twist, on, off, camera, iPad, tablet, lens, point, shoot, picture, photograph, photographer</p>	<p>Forward, backward, right, left, arrow, direction, turn, straight on, directions, program, instructions, back, circle, arrow, sequence, information, research, find</p>	<p>Sort, group, describe pattern, colour, size, height, more, less, count, in total, graph, column, row, square, data, collect, record, most popular, least popular,</p>
<p>Misconceptions</p>	<p>That online is not the real world.</p>	<p>The mouse is an 'animal'.</p>			<p>That a 'program' is only on the television.</p>	
<p>By the end of EYFS children as Computer Learners will:</p>						

- Learn how to operate a camera to take photographs of meaningful creations or moments.
- Learn how to explore and tinker with hardware to develop familiarity and introduce relevant vocabulary.
- Recognise and identify familiar letters and numbers on a keyboard.
- Develop basic mouse skills such as moving and clicking.
- Use a simple online paint tool to create digital art.
- Represent data through sorting and categorising objects in unplugged scenarios.
- Explore branch databases through physical games.
- Use logical reasoning to understand simple instructions and predict the outcome.
- Follow instructions as part of practical activities and games.
- Learn to give simple instructions.
- Learn to debug instructions, with the help of an adult, when things go wrong.
- Recognise that a range of technology is used for different purposes.
- Learn to log in and log out.
- Talk about good & bad choices in real life e.g. taking turns, saying kind things, helping others, telling an adult if something upsets you.
- Play appropriate games on the Internet.
- Talk about good and bad choices when using websites – being kind, telling a grown up if something upsets us & keeping ourselves safe by keeping information private.
- Explore operating equipment.
- Understand simple directions.
- Help adults operate equipment around the school, independently operating simple equipment.
- Use simple software to make things happen Press buttons on a floor robot and talk about the movements.
- Explore options and make choices with toys, software and websites.
- Identify technology they use at home.
- Use a simple pictogram or set of photos to count and organise information.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	How do I navigate around a computer?	Can you fix it?	How can I create something on the computer?	How can we programme a device?	What is a digital image?	How can technology be used to represent data?
Online safety 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.	Recognise common uses of information technology beyond school	Programming 1: Algorithms unplugged. Begin to understand what algorithms are; how they are implemented as programs on digital devices and input instructions.	Create simple programs.	Create simple programs.	Use technology purposefully to create, organise and manipulate digital content.	Use technology purposefully to create, organise and manipulate digital content.

Core Vocabulary	Log in, log out, username, password, computer, mouse, cursor, keyboard, click, drag, Ctrl, tools, menu, right click.	Algorithm, instructions, tasks, order, input, output, device, problem, debug, code, correct.	Digital image, create, design, annotate, document, program, software, spreadsheet.	Clear, demonstration, instructions, Bee-Bot, precise, video, record, inputting.	Background, filter, internet, blurred, crop, edit, resize, search engine, delete, download, save as.	Bar chart, data collection, labels, record, information, sort, pictogram, line graph.
Misconceptions	<p>It is not a computer if it doesn't have internet access.</p> <p>All computers have internet access. All computers are safe to use.</p> <p>I can use my friends account details if I forget/lose mine.</p>	Coder and user are the same thing.	<p>Computers are only used for accessing the internet or playing games.</p> <p>How can you make a list on a computer?</p> <p>Pictures cannot be found on a computer. A program is something what we watch.</p>	<p>You cannot tell a computer what to do.</p> <p>Computers are not safe.</p> <p>Not all computers follow instructions.</p>	<p>You need words to retell a story.</p> <p>You cannot change an image.</p> <p>Everything on the internet is safe.</p>	<p>Computers cannot be used for helping us with collecting information.</p> <p>Computers take longer to carry out a task.</p>
Year 2	What is a computer?	What is an algorithm?	How do you use a word processor?	How can you create an animation?	What sounds and images will you create?	How will present your ideas?
Online safety 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.	Online Safety Recognise common uses of information technology beyond school	Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Create and debug simple programs	Use logical reasoning to predict the behaviour of simple programs	Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
Core Vocabulary	battery, buttons, camera, computer, desktop, device, digital, electricity, function, input, keyboard, laptop, monitor, mouse, output, screen, technology, video, wires	algorithm decomposition algorithm, data loops abstraction debugging, bugs error, correcting	Backspace, home row, home screen, image, italics, keyboard, paste, redo, search, space bar, text, text effects, touch typing, underline, undo, word processor	Algorithm, animation, blocks, bug, button CGI, debug, fluid, icon imitate, instructions, loop, 'On tap', programming, repeat, sequence, sound recording	Animation, background, decompose, digital device, drawing, flipbook, frames, moving images, object, onion skinning, plan, still images	Algorithm, data, digital, digital content, interactive map, interpret, monitor, sensor, temperature, thermometer

Misconceptions	All computers are touchscreen. It only can be a computer if it has a screen.	Debugging does not involve insects.	That there is more than one word processor. Not just text.	Algorithms can be more than one instruction.	Not all sounds are the same. Sounds can be changed.	Computers can link to other devices to collect data.
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By the end of Key Stage 1 children as **Computer Learners** will:

- Learning where keys are located on the keyboard.
- Understanding what a computer is and that it's made up of different components.
- Recognising that buttons cause effects and that technology follows instructions.
- Developing confidence with the keyboard and the basics of touch typing.
- Using a basic range of tools within graphic editing software.
- Developing control of the mouse through dragging, clicking and resizing of images to create different effects.
- Developing understanding of different software tools.
- Developing word processing skills, including altering text, copying and pasting and using keyboard shortcuts.
- Using word processing software to type and reformat text.
- Learning that decomposition means breaking a problem down into smaller parts.
- Using decomposition to solve unplugged challenges.
- Using logical reasoning to predict the behaviour of simple programs.
- Developing the skills associated with sequencing in unplugged activities.
- Following a basic set of instructions.
- Assembling instructions into a simple algorithm.
- Articulating what decomposition is.
- Decomposing a game to predict the algorithms used to create it. Learning that there are different levels of abstraction.
- Explaining what an algorithm is.
- Following an algorithm.
- Creating a clear and precise algorithm.
- Programming a Floor robot to follow a planned route.
- Learning to debug instructions when things go wrong.
- Learning to debug an algorithm in an unplugged scenario.
- Using logical thinking to explore software, predicting, testing and explaining what it does.
- Using an algorithm to write a basic computer program.
- Logging in and out and saving work on their own account.
- When using the internet to search for images, learning what to do if they come across something online that worries them or makes them feel uncomfortable.
- Understanding how to interact safely with others online.
- Recognising how actions on the internet can affect others.
- Recognising what a digital footprint is and how to be careful about what we post.
- Learning how to create a strong password.
- Understanding how to stay safe when talking to people online and what to do if they see or hear something online that makes them feel upset or uncomfortable
- Identifying whether information is safe or unsafe to be shared online.

- Learning to be respectful of others when sharing online and ask for their permission before sharing content.
- Learning strategies for checking if something they read online is true.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 3	How does this work?	How do I change this?	What do the parts of a computer do?	Can I code?	How do you make a trailer?	What is a database?
Online safety use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Transition to Kapow – Unit 1 Begin to understand computer networks including the internet. Write and debug programs that accomplish specific goals	Use logical reasoning to explain how some simple algorithms work. Solve problems by decomposing them into smaller parts	Use technology safely, respectfully and responsibly. Use logical reasoning to explain how some simple algorithms work	Begin to write and debug programs that accomplish specific goals, including controlling or simulating physical systems. Begin to 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. Begin to 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 to present information.	Begin to 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 that present data.
Core Vocabulary	Fact, opinion, internet, belief, reliability, search engine, input, output, graphics, digital image, designing, technology	Internet, content, block & report, privacy settings, backspace, delete, keyboard, spacebar, touch typing, word processing, bold, italic, underline, undo, image, import, layout, text effects, algorithm, solution, instructions, tasks, order, debugging, error, correcting	Input, output, monitor, RAM – random access memory, ROM – read only memory, CPU – central processing unit, memory, mouse, program, HDD – Hard disc drive.	Microbit, program, code, icon, flash, sensor, react, LED display	Dip to black, film editing software, storyboard, camera angle, cross blur, cross zoom, film, edit, directional wipe, cross fade, sound effects, plan, transition, voiceover, time code,	Categorise, database, category, data, chart, fields, filter, graph, information, interpret, PDF, questionnaire, record, representation, sort, spreadsheet.
Misconceptions	May think a program is like one they watch on the television			Children may misunderstand what 'code' means		Children may not understand that a database is like a catalogue and might not recognise the advantages of an online database

Year 4	What is a computing system and network?	Can I solve problems when coding?	What's in a website?	Can I make a simple game?	What is Global Goal 13?	How can I record the weather?
Online safety use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Begin to understand computer networks including the internet.	Use logical reasoning to explain how some simple algorithms work. Solve problems by decomposing them into smaller parts	Understand computer networks and the opportunities they offer for communication and collaboration.	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 begin to correct errors.	Understand computer networks and the opportunities they offer for communication and collaboration. Design, write and debug programs that accomplish specific goals; 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. Select, use and combine a variety of software to present data.
Core vocabulary e-safety, social media, cyberbullying, online, block	technology, network, device, program, World Wide Web, data, spreadsheet, software, router, search engine	Program, algorithms, coding, variables, input, output, animation, repetition, loop	communication, collaboration, fact, belief, opinion, fake news,	algorithms, coding, variables, input, output debug	algorithms, coding, variables, input, output debug	algorithms, coding, variables, input, output debug
Misconceptions	Confusing network and internet. Confusing web browser and search engine.	That computers think rather than programmes need a set of instructions from the programmer.	Confusing network and internet. Confusing web browser and search engine. Website design (look, layout and content) and website functions (through coding)		Confusion between terms weather and climate.	
By the end of Lower Key Stage 2 children as Computer Learners will:						

- Using decomposition to explain the parts of a laptop computer.
- Using decomposition to explore the code behind an animation.
- Using repetition in programs.
- Using logical reasoning to explain how simple algorithms work.
- Explaining the purpose of an algorithm.
- Forming algorithms independently.
- Using decomposition to solve a problem by finding out what code was used.
- Using decomposition to understand the purpose of a script of code.
- Identifying patterns through unplugged activities.
- Using abstraction to identify the important parts when completing both plugged and unplugged activities.
- Using logical thinking to explore more complex software; predicting, testing and explaining what it does.
- Incorporating loops to make code more efficient.
- Continuing existing code.
- Creating algorithms for a specific purpose.
- Coding a simple game.
- Using abstraction and pattern recognition to modify code.
- Incorporating variables to make code more efficient.
- Understanding what the different components of a computer do and how they work together.
- Drawing comparisons across different types of computers.
- Learning about the purpose of routers.
- Using tablets or digital cameras to film a weather forecast.
- Understanding that weather stations use sensors to gather and record data which predicts the weather.
- Understanding the role of the key components of a network.
- Identifying the key components within a network, including whether they are wired or wireless.
- Understanding that websites and videos are files that are shared from one computer to another.
- Learning about the role of packets.
- Understanding how networks work and their purpose.
- Recognising links between networks and the internet.
- Learning how data is transferred.
- Understanding that computer networks provide multiple services, such as the World Wide Web, and opportunities for communication and collaboration.
- Taking photographs and recording video to tell a story.
- Using software to edit and enhance their video adding music, sounds and text on screen with transitions.
- Use online software for documents, presentations, forms and spreadsheets.
- Using software to work collaboratively with others.
- Understanding why some results come before others when searching.
- Understanding that information found by searching the internet is not all grounded in fact.
- Searching the internet for data.
- Understanding that data is used to forecast weather.
- Recording data in a spreadsheet independently.
- Sorting data in a spreadsheet to compare using the 'sort by...' option.

- Designing a device which gathers and records sensor data.
- Recognising how social media platforms are used to interact.
- Understanding that software can be used collaboratively online to work as a team.
- Recognising that different information is shared online including facts, beliefs and opinions.
- Learning how to identify reliable information when searching online.
- Learning how to stay safe on social media.
- Considering the impact technology can have on mood.
- Learning about cyberbullying.
- Learning that not all emails are genuine, recognising when an email might be fake and what to do about it.
- Recognising that information on the internet might not be true or correct and that some sources are more trustworthy than others.
- Learning to make judgements about the accuracy of online searches. Identifying forms of advertising online.
- Recognising what appropriate behaviour is when collaborating with others online.
- Reflecting on the positives and negatives of time spent online.
- Identifying respectful and disrespectful online behaviour.

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 5	What systems can I use? Kapow Transition Unit 1	What is a Microbit? Kapow Transition unit 2	How does a computer know where to look? Kapow Computing systems and Networks : Search Engines	Can computers make music? Kapow Programming 1 : Music	Can I make a movie from pictures? Creating media: Stop motion animation	How do computers work in space? Data handling: Mars Rover 1
Online safety use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Select, use and combine a variety of software to present data.	Use logical reasoning to explain how some simple algorithms work. 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.	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 presenting information. Design, write and debug programs that accomplish specific goals; 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 presenting information. Design, write and debug programs that accomplish specific goals; 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 collecting, analysing, evaluating and presenting data and information. Understand computer networks and the opportunities they offer for communication and collaboration

Core Vocabulary	Home row, key , typing, space bar, backspace, Letters, punctuation, computer, desktop, laptop, mouse, monitor, buttons, computational thinking, pattern, recognition, algorithm, design, decompose	Algorithm, blocks, code block, connection, create, debug, designing, download, input, instructions, load, loop, Micro:bit, outputs, repetition, reset, scoreboard, USB, variables	data privacy, network, online, search engine, website, inaccurate information, real, copyright, credit, fair, inappropriate, index, page rank, search engine, web crawler	Sonic Pi, Tinker, predict, performance, coding, error, command, instructions, debugging.	Animation, still images, moving images, flip book, frames, plan, storyboard, stop motion, digital device, onion skinning, character, model, frame, background.	Data, transmission, discovery, distance, signal, 8-bit binary, numerical data, sequence, byte, CPU, input, output, RAM, simulation
Misconceptions	Logging on Keyboards Capital letters How to navigate	Accessing and logging into MB Classroom Relationship between Scratch/PM Coding and MB Use of input and output Resilience – used to things ‘just working’	Terminology Physical paths taken by data Data and electricity and physical things	Input and output Debugging Problem solving Resilience – used to things ‘just working’	Cameras need to remain still Animation is still images	How data is transmitted Distance travelled = delay Data is built of bytes, kilobytes, megabytes, gigabytes, terabytes.
Year 6	What do I need to know? Kapow Primary Transitional Unit 1	Can you crack the code? Kapow Primary Bletchley Park	What does the future hold for computing? Kapow Primary History of computers	What happens when we explore a program? Kapow Primary Transitional Unit 2	What does data show? Kapow Primary Big Data 1	How does that happen? Kapow Primary Introduction to Python
Online safety use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	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. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by	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	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	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 logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.

		decomposing them into smaller parts.	simulating physical systems; solve problems by decomposing them into smaller parts.			
Core Vocabulary	Online, report, block, privacy Network, internet, website, search engine, privacy, network, real, fake	Consent, private, settings, screengrab Code, scrambled, password, secure, brute force hacking, chip and pin system, trial and error, combination,	Online reputation, digital footprint, digital personality, anonymity Overlay, record, sound effect, sound clip, track, background noise, script, computer, graphics	Online bullying, screen grab, screenshot, copy, paste, block and report Code, repetition, loop, program, code, program, decompose, plan, coding blocks, debug, variables.	Biometrics, two factor authentication, password, username, secure, hacking Barcode, QR code, QR scanner, data, encrypt, column, data, input, algorithm	Personal information, scammers, phishing, malware, software updates, reliable source, antivirus Loop, code, command, shape, patterns, instructions, input, import, variable, function
Misconceptions	Limited awareness of how/ when/ why they should report online concerns and to whom How networks work/ monitoring of school networks	Understanding consent Debugging programs	Permanency/ ownership of digital footprint Use of different programmes Solving problems with technology	Limited awareness of how/ when/ why they should report online concerns and to whom How codes are inputted Problem-solving	Security of passwords Use of technology to access data	Personal safety How commands are inputted Problem-solving

By the end of Upper Key Stage 2 children as **Computer Learners** will:

- Decomposing animations into a series of images.
- Decomposing a story to be able to plan a program to tell a story.
- Predicting how software will work based on previous experience.
- Writing more complex algorithms for a purpose.
- Decomposing a program into an algorithm.
- Using past experiences to help solve new problems.
- Writing increasingly complex algorithms for a purpose.
- Learning that external devices can be programmed by a separate computer.
- Learning about the history of computers and how they have evolved over time.
- Using the understanding of historic computers to design a computer of the future.
- Understanding and identifying barcodes, QR codes and RFID.
- Identifying devices and applications that can scan or read barcodes, QR codes and RFID.
- Using logical thinking to explore software more independently, making predictions based on their previous experience.
- Using software programme Sonic Pi/Scratch to create music.

- Using the video editing software to animate.
- Identify ways to improve and edit programs, videos, images etc. Independently learning how to use 3D design software package TinkerCAD.
- Using logical thinking to explore software independently, iterating ideas and testing continuously.
- Using search and word processing skills to create a presentation.
- Developing searching skills to help find relevant information on the internet.
- Understanding how search engines work.
- Understanding how data is collected in remote or dangerous places.
- Understanding how data might be used to tell us about a location.
- Understanding how barcodes, QR codes and RFID work.
- Gathering and analysing data in real time.
- Creating formulas and sorting data within spreadsheets.
- Learn about different forms of communication that have developed with the use of technology.
- Learning how 'big data' can be used to solve a problem or improve efficiency.
- Identifying possible dangers online and learning how to stay safe.
- Evaluating the pros and cons of online communication.
- Recognising that information on the internet might not be true or correct and learning ways of checking validity.
- Learning what to do if they experience bullying online.
- Learning to use an online community safely.
- Learning about the positive and negative impacts of sharing online.
- Learning strategies to create a positive online reputation.
- Understanding the importance of secure passwords and how to create them.
- Learning strategies to capture evidence of online bullying in order to seek help.
- Using search engines safely and effectively.
- Recognising that updated software can help to prevent data corruption and hacking.