St Felix RC Primary School

Computing Progression Map

Level expected at the end of EYFS: Understanding the World (Technology)
• Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.

Key Stage 1 National Curriculum Expectations:	Key Stage 2 National Curriculum Expectations:
Pupils should be taught to: • 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; • use technology purposefully to create, organise, store, manipulate and retrieve digital content; • recognise common uses of information technology beyond school; • 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.	Pupils should be taught to: • 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; • understand computer networks including the internet; how they can provide multiple services, such as the world wide web, and the opportunities they offer for communication and collaboration; • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content; • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information; • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Information Technology Skills Progression

UtW: Technology
Select and use technology for particular purposes.

National Curriculum Statement KS1:
Use technology purposefully to create, organise, store, manipulate and retrieve digital content

National Curriculum Statement KS2:
Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of program, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Photo	**Experiment** with the camera app on an Ipad to capture an image/camera devices	**Capture, crop, change colours and add text** to images	**Capture an image, straighten, rotate and crop**	**Capture** a horizontal and vertical panoramic image	**Capture** an image using burst mode and **animate** images	**Capture, crop, mask, edit and layer images**	**Tell a story with a series of photos** using Keynote
	ECC Teacher Guide Young Learners **People and Things**	ECC Teacher Guide Young Learners **Edit Photos**	ECC **Portraits**	ECC **Scenes**	ECC **Action**	ECC **Collage** **Composition**	ECC **Photo Journalism**
Drawing	**Experiment** with sketching software	**Draw** different kinds of lines using a variety of pens and brushes.	**Combine basic shapes to sketch objects, add text** labels to sketches, and use the mark-up tool.	**Draw a well-proportioned face, combine shapes** to draw human features, add details to suggest movement and action.	**Use shapes to draw a building**, visualise a place then turn it into the background of a drawing, create a drawing that shows people in a specific place.	**Create a variety of block letters**, use various pen, brush styles and colours, and change the pressure to make lines thicker, thinner, darker and lighter.	**Draw 3D Shapes, add shadow and depth, use mark-up tools** on photos to trace simple shapes.
	2Simple 2Paint	ECC Teacher Guide Young Learners **Patterns**	ECC Teacher Guide Young Learners **Things**	ECC Teacher Guide Young Learners **People**	ECC Teacher Guide Young Learners **Places**	ECC **Word Art**	ECC **Observational Sketching**
Video	**Experiment** with the video feature on an ipad to record something of interest	**Record, play and delete** individual clips	**Record**, experiment with different angles, **trim and edit** clip.	**Record, arrange clips in a sequence, add tiles and graphics**.	**Record, trim and arrange clips** whilst adding posters, stickers, emojis and your own photos. **Use filters and music**	**Record, identify and capture** multiple shot types.	**Record and edit a trailer in IMovie and animate drawings and objects**.
	Video feature on iPad **2animate**	ECC Teachers Guide Young Learners **Introduce Yourself**	ECC Teachers Guide Young Learners **Slow Motion**	ECC Teachers Guide Young Learners **Tell A Story**	ECC **Your First Movie** **2animate**	ECC **Silent Movies**	ECC **Animatics**
Music	**Record** sounds in the environment – use voice memos.	**Record** sounds clips into a Book Creator document	Experiment and record sounds using the Audio Recorder in Garageband.	**Record** your voice using the Audio Recorder (Garageband) **Add** vocal effects and musical loops. **Adjust** the volume, length and placement of recorded tracks.	**Explore, play and record** a range of digital percussion instruments. **Compose and record** a simple rhythmic pattern while maintaining a steady beat **Evaluate** tracks, save and name them.	**Record a variety of Touch Instruments** to build a track or song. **Evaluate** the quality of their tracks, save and name them.	**Record a variety of Touch Instruments** to build a track or song that serves a purpose eg. advertise a product **Evaluate** the quality of their own and peers tracks and edit their track following feedback
	Voice Memo - Ipad	Book creator Toca Band	Garageband	ECC Teacher Guide Young Learners **Recording Your Voice**	ECC Teacher Guide Young Learners **Rhythm and Beats**	ECC Teacher Guide Young Learners **Chords and Songs**	ECC Teacher Guide Young Learners **Chords and Songs**

Text	**Experiment and play** keyboard games using 2simple 2type **Use the mouse/track pad** to play games.	**Use** a SPACE BAR to make spaces between typed words **Locate** letters on the keyboard	**Use** the BACK SPACE/DELETE to correct text. **Use** the SHIFT KEY/CAPS LOCK to type capital letters Word process to **type** short texts, **save and edit later.**	**Amend text** (by highlighting and using SELECT/DELETE and COPY/PASTE and save changes. **Use** individual fingers to input text. **Use** shift Key to input characters. 	**Use a keyboard with 2 hands.** **Use** a range of keyboard shortcuts. 	**Use a keyboard effectively**, with 2 hands. Know how to use a spell check 	**Use advanced tools in word processing such as tabs, formatting, line spacing etc appropriately to create quality presentations for a known audience.** 
	JIT5 Write **2simple 2type** 	**JIT5 Write** **Chrome books** **– Typing Club** 	**JIT5 Write** **Chrome books** **– Typing Club** 	**Microsoft word** **Pages (Ipad)** 	**Microsoft word** **Pages (Ipad)** 	**Microsoft word** **Pages (Ipad)** 	**Microsoft word** **Pages (Ipad)** 

Computer Science Skills Progression

UtW: Technology

National Curriculum Statement KS1:
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.

National Curriculum Statement KS2:
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.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Programming	**Follow** simple instructions **Explore by playing with floor robots/digital devices**	**Create a sequence of steps** that others can follow (for floor robots on onscreen sprites) **Explore the outcomes when a sequence is carried out.**	**Plan and enter a sequence of instructions**; specific distance	**Design, write and enter a sequence of instructions** to achieve a specific outcome. Identify and use repetitions or loops in a program sequence,	Design, write and enter a sequence of instructions to achieve a specific outcome. Use sensors to 'trigger' an action, such as sound or movement. Describe and demonstrate a simple program that contains a looping element and explain the importance of repetition.	Design, write and debug simple sequences of instructions (algorithms) including IF, THEN and OTHERWISE commands, to decide if something is true or false . Use a range of sensors to control a physical system.	Design, write and debug a program to control a physical system, which may include output devices, such as motors, lights and buzzers. Demostrate how programs run in an exact order by following a sequence of instrcuctions, and test and debug programs.
	Beebots 2Simple 2go Or JiT 5	Beebots JIT5 Turtle Scratch Junior	**ALEX** **Scratch Junior**	**Scratch**	**Scratch**	**Everyone Can Code Puzzles/Adventures** **Swift Playgrounds**	**Everyone Can Code Puzzles/Adventures** Swift Playgrounds
Debugging	Explore what happens when buttons are pushed on an electronic toy or device	Understand programs execute by following precise instructions	Identify and debug a simple algorithm.	I can debug programs so they run correctly Predicting what will happen in my program and notice/correct any mistakes.	I can solve problems by decomposing into smaller parts	I can test, debug and improve programs	I can use logical reasoning to detect and correct errors in algorithms
	Beebots iPad 2Simple 2go	Beebots JIT5 Turtle Scratch Junior	ALEX Scratch Junior	Scratch	Scratch	Everyone Can Code Puzzles/Adventures Swift Playgrounds	Everyone Can Code Puzzles/Adventures Swift Playgrounds
Hardware	I can name the basic parts of a computer – screen, keyboard and mouse	I can name more parts of a computer – mouse pad, laptop, printer, wifi	Talk about similarities and differences between physical hardware and software on a screen, i.e. beebot app and beebots	I can understand the main hardware components of a computer system I understand that there are input and output devices	**I can understand how a computer stores data** **I can understand how the internet works, including how it is structured and that data travels along**	I understand about different types of robotics and how they can impact our lives	I understand about the advancements in technology and the impact this has had on society
	Twinkl Lessons	**https://www.bbc.co.uk/bitesize/topics/zbhgjxs/articles/z9myvcw** **Twinkl lessons**	**Twinkl Lessons**	**https://www.bbc.co.uk/bitesize/topics/zf2f9j6/articles/zx8hpv4**	**https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/zx3q7ty** **https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/z3tbgk7**	**https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/zxjsfg8**	**https://www.bbc.co.uk/bitesize/topics/zs7s4wx/articles/z2nbgk7**

Digital Literacy Skills Progression

UtW: Technology	National Curriculum Statement KS1: 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.		National Curriculum Statement KS2: 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;			
	EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Internet Safety	**Online relationships** I can give examples of how I (might) use technology with people I know. I can recognise some ways in which the internet can be used to communicate. **Online bullying** I can offer examples of how this can make others feel. I can describe ways that people can be unkind online.	**Online relationships** I can give examples of when I should ask permission to do something online and explain why this is important. I can use the internet with adult support to communicate with people I know (e.g. video call apps or services). I can explain why it is important to be considerate and kind to people online and respect their choices. I can explain why things one person finds funny or sad online may not always be seen in the same way as others. **Online bullying** I can describe how to behave online in ways that do not upset others and can give examples.	**Online relationships** I can give examples of how someone might use technology to communicate with others they don't also know offline and explain why this might be risky. (e.g. email, online gaming, a pen-pal in another school/country). I can explain who I should ask before sharing things about myself and others online. I can explain why I have a right to say 'no' or 'I will have to ask someone' and who can help me if I feel under pressure. I can explain why I should always ask a trusted adult before clicking 'yes', 'agree', or 'accept' online. **Online bullying** I can explain what bullying is, how people may bully others and how bullying can make someone feel. I can explain why anyone who experiences bullying is not to blame. I can talk about how anyone experiences bullying can get help.	**Online relationships** I can describe ways people who have similar likes and interests can get together online. I can explain what it means to 'know someone' online and why this might be different from knowing someone offline. I can explain what is meant by 'trusting someone' online, why this is different to 'liking someone' online. I can explain why someone may change their mind about trusting anyone with something if they feel nervous, uncomfortable or worried. I can explain how someone's feelings can be hurt by what is said or written online. I can explain the importance of giving and gaining permission before sharing things online. **Online bullying** I can describe appropriate ways to behave towards other people online and why this is important. I can give examples of how bullying behaviour could appear online and how someone can get support.	**Online relationships** I can describe strategies for safe and fun experiences in a range of online social environments e.g. livestreaming, gaming platforms. I can give examples of how to be respectful to others online and how to recognise healthy and unhealthy behaviours. I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts, feelings and beliefs. **Online bullying** I can recognise when someone is upset, hurt or angry online. I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation).	**Online relationships** I can give examples of technology–specific forms of communication (e.g. emojis, memes, gifs). I can explain that there are some people who may want to do me or my friends harm and I can recognise this is not my/our fault. I can describe some of the ways people may be involved in online communities (e.g. gaming communities or social media groups). I can demonstrate how to support others online. **Online bullying** I can recognise and describe that online bullying can be different to bullying in the physical world. I can describe how what one person perceives as playful joking and teasing (including banter) might be experienced by others as bullying. I can identify a range of ways to report concerns and access support both in school and at home about online bullying. (e.g. Childline or The Mix). and block abusive users.	**Online relationships** I can explain how sharing something online may have an impact positively or negatively. I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and how to support them if others do not. I can describe how things shared privately online can have unintended consequences for others. E.g. Screen-grabs. I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this. **Online bullying** I can describe how to capture bullying content as evidence (e.g. Screen-grab, URL, profile) to share with others who can help me. I can explain how someone would report online bullying in different contexts.
	National Online Safety	National Online Safety Hector's World	National Online Safety	National Online Safety Hector's World	National Online Safety	National Online Safety Hector's World	National Online Safety

Research	**Copyright and ownership** I know that work I create belongs to me. I can name my work so that others know it belongs to me. **Managing online information** I can identify devices I could use to access information on the internet. I can talk about how I can use the internet to find things out.	**Copyright and ownership** I can explain why work I create using technology belongs to me I can say why it belongs to me (e.g. I designed it or I filmed it). I can save my work under a suitable title/name so that others know it belongs to me (e.g. filename, name on content). I understand that work made by others does not belong to me even if I save a copy. **Managing online information** I can give simple examples of how to find information using digital technologies e.g. search engines, voice activated searching. I know/understand that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe/ a joke. I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable, worried or frightened.	**Copyright and ownership** I can recognise that content on the internet may belong to other people. I can describe why other people's work belongs to them. **Managing online information** I can use simple keywords in search engines. I can demonstrate how to navigate a simple webpage to get information I need (e.g. home, forward, back buttons; links, tabs and sections. I can explain what voice activated searching is and how it might be used, and know it is not real person (e.g. Alexa, Google Now, Siri). I can explain the difference between things that are imaginary, 'made up', or 'make believe' and things that are 'true' or 'real'. I can explain why come information I find online may not be real or true.	**Copyright and ownership** I can explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause. **Managing online information** I can demonstrate how to use key phrases in search engines to gather accurate information online. I can explain what autocomplete is and how to choose the best suggestion. I can explain how the internet can be used to buy and sell things I can explain the difference between a belief, an opinion and a fact and give examples of how and where they might be shared online. E.g. In videos, memes, posts, news stories etc. I can explain that not all opinions shared may be accepted as true or fair by others (E.g. monsters under the bed) I can describe and demonstrate how we can get help from a trusted adult if we see	**Copyright and ownership** When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to use it. I can give some simple examples of content which I must not use without permission from the owner e.g. videos, music, images. **Managing online information** I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites). I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; in app purchases; pop ups). I can explain why lots of people sharing the same opinions or beliefs online do not make those beliefs or opinions true such as 'fake news' and altering photographs. I can explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and risks might be.	**Copyright and ownership** I can assess and justify when it is acceptable to use the work of others. I can give examples of content that is permitted to be reused and know how this content can be found online. **Managing online information** I can explain the benefits and limitations of using different types of search technologies e.g. voice-activated only giving one search result. I can explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be sceptical. I can evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results. I can explain key concepts including: information, reviews, fact, opinion, belief, validity, reliability , evidence and stereotypes. I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by pop-ups, targeted ads, commercial companies or by vloggers, content creators, influencers).	**Copyright and ownership** I can demonstrate the use of a search tool to find and access online content which can be reused by others. I can demonstrate how to make references to and acknowledge sources I have used from the internet. **Managing online information** I can explain what is meant by a 'hoax' or 'opinion', misinformation and disinformation and why someone would need to think carefully before they share these. I can explain how search engines work and how the results are selected and ranked and use them effectively. I can explain how and why some people may present opinions as facts; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal. I can define the terms 'influence', 'manipulation', and 'persuasion' and explain how someone might encounter these online (e.g. advertising and 'ad targeting' and targeting for fake news and persuasive design.).
	National Online Safety Google Earth Google Chrome Safari	National Online Safety Search using the keyboard mic Safari Google Chrome Hector's World	National Online Safety Search using the keyboard mic Safari Google Chrome Hector's World	National Online Safety Search using the keyboard mic Safari Google Chrome Hector's World	National Online Safety Search using the keyboard mic Safari Google Chrome Hector's World	National Online Safety Search using the keyboard mic Safari Google Chrome Hector's World	National Online Safety Search using the keyboard mic Safari Google Chrome Hector's World

Online Identity	**Online reputation** I can identify ways that I can put information on the internet. **Self image and identity** I can recognise, online or offline that anyone can say 'no'/'please stop'/'I'll tell'/'I'll ask' to somebody who makes them feel sad, uncomfortable, embarrassed or upset.	**Online reputation** I can recognise that information can stay online and could be copied. I can describe what information I should not put online without asking a trusted adult first. **Self image and identity** I can recognise that there may be people online who could make someone feel sad, embarrassed or upset. If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help.	**Online reputation** I can explain how information put online about someone can last for a long time. I can describe how anyone's online information could be seen by others. I know who to talk to if something has been put online without consent or if it is incorrect. **Self image and identity** I can explain how other people may look and act differently online and offline. I can give examples of issues that might make someone feel sad, worried, uncomfortable or frightened; I can give examples of how they might get help.	**Online reputation** I can explain how to search for information about others online. I can give example of what anyone may or may not be willing to share about themselves online. I can explain the need to be careful before sharing. I can explain who someone can ask if they are unsure about putting something online. **Self image and identity** I can explain what is meant by the term 'identity'. I can explain how people can represent themselves in different ways online. I can explain ways in which someone might change their identity depending on what they are doing online (e.g. gaming; using an avatar; social media) and why.	**Online reputation** I can describe how to find out information about others by searching online. I can explain ways that some of the information about anyone online could have been created, copied or shared by others. **Self image and identity** I can explain how my online identity can be different to my offline identity. I can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them. I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.	**Online reputation** I can search for information about an individual online and summarise the information found. I can describe ways that information about anyone online can be used by others to make judgements about an individual and why these may be incorrect. **Self image and identity** I can explain how identity online can be copied/modified or altered. I can demonstrate how to make responsible choices about having an online identity, depending on context.	**Online reputation** I can explain the ways in which anyone can develop a positive online reputation. I can explain strategies anyone can use to protect the 'digital personality' and online reputation, including degrees of anonymity. **Self image and identity** I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online. I can explain the importance of asking until I get the help needed.
	National Online Safety	National Online Safety	National Online Safety	National Online Safety	National Online Safety	National Online Safety	National Online Safety

Technology in Our Lives							
	Health, wellbeing and lifestyle I can give some simple examples of these rules. I can identify rules that help keep us safe and healthy in and beyond the home when I am using technology. **Privacy and security** I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location). I can describe who would be trustworthy to share this information with; I can explain why they are trusted.	**Health, wellbeing and lifestyle** I can explain rules to keep myself safe when using technology both in and beyond the home. **Privacy and security** I can explain that passwords are used to protect information, accounts and devices. I can recognise more detailed examples of information that is personal to someone (e.g. where someone lives and goes to school, family names). I can explain why it is important to always ask a trusted adult before sharing any personal information online, belonging to myself or others.	**Health, wellbeing and lifestyle** I can explain simple guidance for using technology in different environments and settings e.g. accessing online technologies in public places and the home environment. I can say how those rules/guides can help anyone accessing online technologies. **Privacy and security** I can explain how passwords can be used to protect information, accounts and devices. I can explain and give examples of what is meant by 'private' and 'keeping things private'. I can describe and explain some rules for keeping personal information private (e.g. creating and protecting passwords). I can explain how some people may have devices in the their homes connected to the internet and give some examples (e.g. lights, fridges, toys, televisions.).	**Health, wellbeing and lifestyle** I can explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships; I can give examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos). I can explain why some online activities have age restrictions, why it is important to follow them and know who I can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or web sites). **Privacy and security** I can describe simple strategies for creating and keeping passwords private. I can give reasons why someone should only share information with people they choose to and can trust. I can explain that if they are not sure of feel pressured then they should tell a trusted adult. I can describe how connected devices can collect and share anyone's information with others.	**Health, wellbeing and lifestyle** I can explain how using technology can be a distraction from other things, in both a positive and negative way. I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time. **Privacy and security** I can describe strategies for keeping personal information private, depending on context. I can explain that internet use is never fully private and is monitored e.g. adult supervision. I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure. I know what the digital age of consent is and the impact this has on online services asking for consent.	**Health, wellbeing and lifestyle** I can describe ways that technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively and can describe some strategies to promote health and well-being with regards to technology. I can assess information about health and well-being online and how we should balance this with talking to trusted adults and professionals. I can explain how and why some apps and games may request or take payment for additional content (e.g. in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing. **Privacy and security** I can explain what a strong password is and demonstrate how to create one. I can explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice messages, geo-location) with others. I can explain what app permissions are and can give some examples.	**Health, wellbeing and lifestyle** I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. I can recognise features of persuasive design and how they are used to keep users engaged (current and future use). I can assess and action different strategies to limit the impact of technology on health (e.g. night-shift mode, regular breaks, correct posture, sleep, diet and exercise). **Privacy and security** I can describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser) and what to do if a password is shared, lost or stolen. I can describe how and why people should keep their software and apps up to date e.g. auto updates. I can describe simple ways to increase privacy on apps and services that provide privacy settings. I can describe ways in which some online content targets people to gain money or information illegally (e.g. scams, phishing).
	National Online Safety	National Online Safety	National Online Safety Hector's World	National Online Safety	National Online Safety Hector's World	National Online Safety	National Online Safety Hector's World

Data Handling Skills Progression 2021

UtW: Technology	**National Curriculum Statement KS1:** Use technology purposefully to create, organise, store, manipulate and retrieve digital content		**National Curriculum Statement KS2:** Select, use and combine a variety of software (including internet services) on a range of digital devices to collect, analyse, evaluate and present data and information			
	EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Data collection	**Collect data as a class group**	Discuss different ways in which information can be shown. Use technology to collect information, including photos, video and sound.	Discuss different ways I use technology to collect information, including a camera, microscope or sound recorder. Explain what kind of information I could use to help me investigate a question.	Collect data to help me answer a question. Choose information to put into a data table. Recognise which information is suitable for their topic. Discuss and explain the different ways data can be organised.	Design a questionnaire to collect information, sort and organize information to use in other ways. Create and search a branching database. Create a database from information I have selected Collect data and identify where it could be inaccurate. Choose the best way to present data to my friends.	Select an appropriate tool to help me collect data. Use a spreadsheet and database to collect and record data.	Select the most effective tool to collect data for my investigation. Create data collection forms and enter data accurately from these. Sort and filter information.
	2Simple **2count** **JIT5 Chart** **JIT5 Pictogram**	**JIT5 Chart** **JIT5** **Pictogram**	**JIT5 Chart** **JIT5** **Pictogram**	**Numbers**	**Numbers**	**Numbers** **Excel**	**Numbers** **Excel**
Data analysis	**Look at pictograms/charts** as a class, talk about what they show.	Create a pictograph and talk to you about what I have found out. Sort different kinds of information and present it to others.	Make and save a chart/graph using the data I collect and use it to find the answer to simple questions e.g what is the most popular eye colour in our class? Talk about the data that is shown in my chart or graph. Begin to understand a branching database.	Make and save a chart/graph using the data I collect Search a ready-made database to answer questions. Add to a database. Make a branching database.	Plan, create and search a database to answer questions. Use a data logger to record and share my readings with my friends. Organise data in different ways. Make and save a chart/graph using the data I collect	Present data in an appropriate way. Discuss mistakes in data and suggest how it could be checked. Use the formulae AVERAGE and SUM to assist in analysing data	Know how to check for and spot inaccurate data. Know which formulas to use when I want to change my spreadsheet model. Make graphs from the calculations on my spreadsheet. Interpret the data collected. Present data in an effective way.
	2Simple **2count** **JIT5 Chart** **JIT5 Pictogram**	**JIT5 Chart** **JIT5** **Pictogram**	**JIT5 Chart** **JIT5** **Pictogram**	**Numbers**	**Numbers**	**Numbers** **Excel**	**Numbers** **Excel**

Computing - Whole School Coverage Overview

Discrete lessons linked to cross curricular theme	**Autumn**	**Spring**	**Summer**
EYFS	Computer Science Programming, debugging, hardware, thinking logically	Digital Literacy Internet Safety, online identity, research, technology in our lives	Information Technology Photo, drawing, video, music, text.
KS1 **Year 1** **Year 2**	Computer Science Programming, debugging, hardware, thinking logically	Information Technology Photo, drawing, video, music, text.	Digital Literacy Internet Safety, online identity, research, technology in our lives
LKS2 **Year 3** **Year 4**	Digital Literacy Internet Safety, online identity, research, technology in our lives	Computer Science Programming, debugging, hardware, thinking logically	Information Technology Photo, drawing, video, music, text.
UKS2 **Year 5** **Year 6**	Information Technology Photo, drawing, video, music, text.	Digital Literacy Internet Safety, online identity, research, technology in our lives	Computer Science Programming, debugging, hardware, thinking logically

NB - Data Handling strand is to be taught where most appropriate to your curriculum. Eg. Mathematics in Autumn may incorporate gathering data for heights of class or Geography in Spring may incorporate gathering, and analysing, data on rainfall or Science in Summer may incorporate experimental data.

Vocabulary Progression

The vocabulary that our children use to discuss Computing is intended to be cumulative as it is for all subjects. Children in Year 5 for example, should still be able to identify, name and use the 'Space bar' on a keyboard as well as use all of the vocabulary from all their previous year groups.

Computing is a vocabulary, terminology and acronym rich subject and is developing new constantly. There are specific non-negotiable words to be used and taught in each year group shown below but also included below is a variety of words that may also be encountered and relevant in that year group.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Non-negotiables	**Keyboard** **Screen** **Programme** **Safe** **Rules** **photograph**	**Website** **Multimedia** **Algorithm** **Data** **Private** **space bar**	**cyber-bullying** **keyword searching** **digital footprint** **debug** **coding** **word process**	**E-safety rules** **personal information** **variables** **open** **save** **present data**	**Copyright** **search engine** **decomposing** **input** **output** **enhance**	**software** **hardware** **responsibility** **editing tools** **spreadsheet** **formula**	**Variables** **Loops** **Acronyms** **Editing** **Data analysis** **AVERAGE**
		rules online email robot patterns programme digital purpose online tools shut down communicate video sound pictogram	sites right-angle turn sprites sequence frames predict select tool drawing tool Search tool stop motion templates animation documents present enter/return	log on attach mechanical systems coordinates broadcast import sequence debugging test + improve sequence programming alignment copy paste collaborate questioning database recording data	reporting secure validate digital content logical reasoning command 3D game debug algorithms lasso tool download upload resize layering critically evaluate data logger	input device output device digital device profile motherboard hard drive RAM ROM CPU GPU operating system design navigate 3D model refinement	AR (augmented reality) connectivity generate operators list arithmetic operators manipulating digital art digital music file format (file type) MP3 WAV MIDI MP4 multitask Concurrently process interpret