



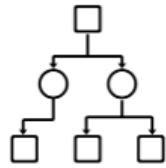
Computing Curriculum Progression

At St Peter's we are committed to matching the pace of an ever-changing world by constantly keeping abreast of technological innovation and cutting-edge thinking.



Computing (One Page Overview)

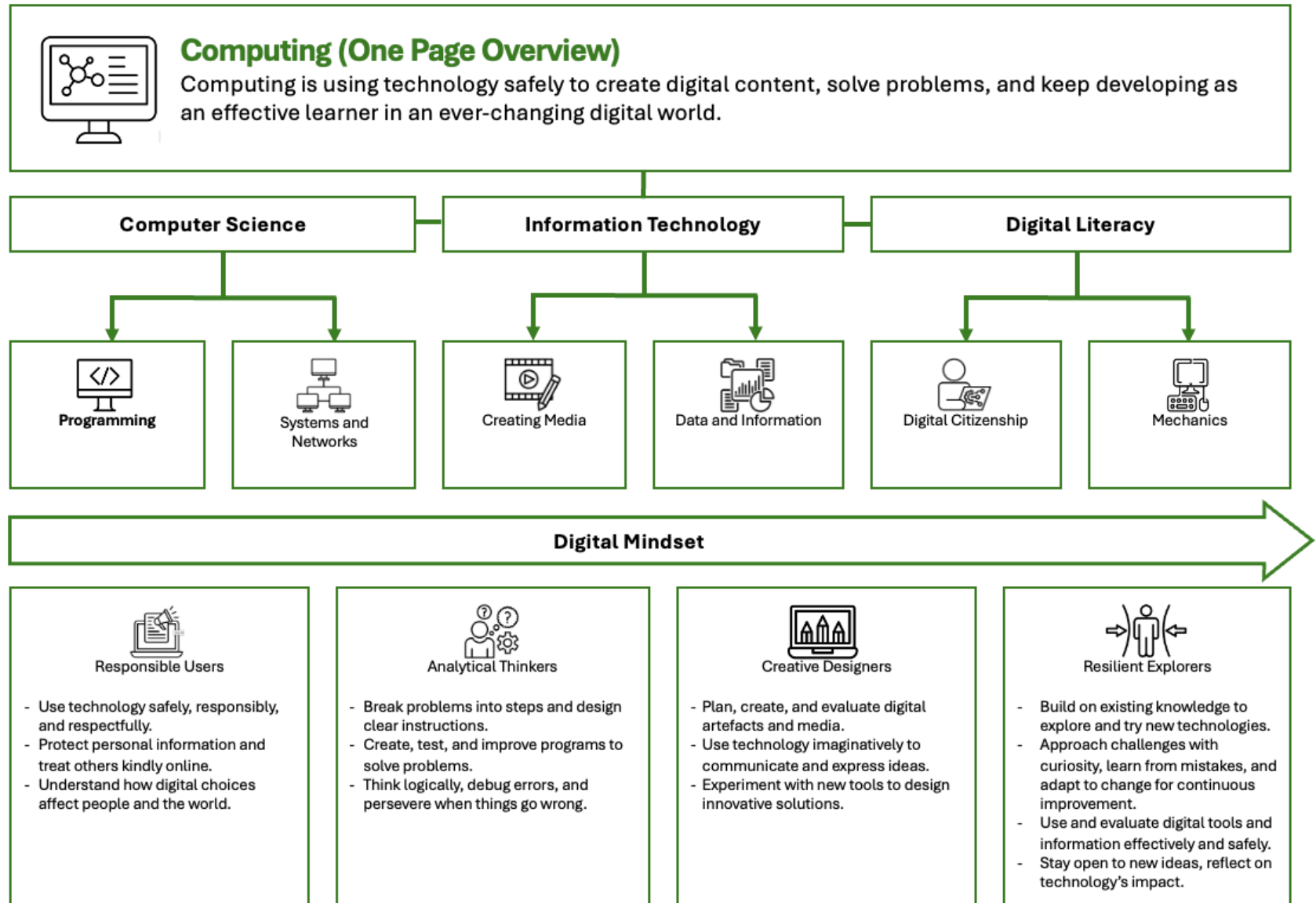
Computing is using technology safely to create digital content, solve problems, and keep developing as an effective learner in an ever-changing digital world.



We organise our knowledge into key concepts



As computer scientist, we adopt a digital mindset to help us explore



EYES

Year 1

	Digital Citizenship							
	 Self-image and identity	 Online relationships	 Online reputation	 Online bullying	 Managing information online	 Health, well-being and lifestyle	 Privacy and Security	 Copyright and ownership
Knowledge progression	• I recognise that there may be people online who could make someone feel sad or upset. • I can give examples of when to speak to an adult if something happens that makes me feel sad, uncomfortable or upset.	• 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 to respect their choices. • I can explain why things one person finds funny or sad online may not always be seen in the same way by others.	• 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.	• I can describe how to behave online in ways that do not upset others.	• I can give simple examples of ways to find information using digital technology e.g. search engines, voice activated searching • I know that we can see different things online, including real, make-believe, or funny content. • I know how to get help from a trusted adult if something online makes me feel upset or worried.	• I can explain rules to keep myself safe when using technology both in and beyond the home.	• I can explain that passwords keep information, accounts, and devices safe. • I can recognise more detailed information that is personal to me. • I can explain why I should always ask a trusted adult before sharing personal information online, for myself or others.	• 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 / names so that others know if belongs to me. • I understand that work created by others does not belong to me even if I save a copy.



Mechanics



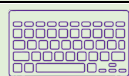
Touchscreen

- Tap to select items accurately
- Pinch to zoom



Mouse and trackpad

- Click and drag objects accurately
- Double click to open items



Keyboard

- Use a keyboard to type words
- Use the backspace button to delete letters
- Use the full stop key
- Use caps lock and shift to write capital letters
- To use return key to start a new line



File management

- Name and save document in a specific folder.
- Understand that work is saved on a device



Connections

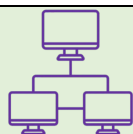
- Plug in simple devices e.g. headphones



iPad

- Log in to individual iPad account using a passcode
- Lock and unlock an iPad
- Log off an iPad
- Take photos and videos using the iPad

Knowledge progression



Systems and networks



Devices

- Identify technology in the classroom and at school.
- Understand that digital devices have different purposes (input/output).
- Recognise that devices can be connected (wired or wireless).
- Understand that information can be shared between connected devices.



Internet

•



Online safety

•



Data

•

Knowledge progression

	Term 1		Term 2	Term 3 & 4	
Big Idea	 Programming – How do Beebots know where to go? Beebots		 Creating media – How do you make a picture book? Pages	 Programming – Can you make a cat dance? Scratch Jr	
Knowledge progression	• Move Beebots in all four directions • Choose the order of commands in a sequence • Predict what will happen in a Beebot code • Debug a Beebot code • Code a Beebot to follow a certain route • Code a Beebot to go around certain obstacles		• Create a new document and type on it using a keyboard • Add pictures from the camera roll and Safari • Add a text box and other shapes • Format text by changing the font, the colour and making it bold, underlines or italic • Use the undo button to correct mistakes • For a range of shapes and images that have been added, change the fill colour and the border • Compare writing on a computer to writing on paper	• Add and delete sprites (characters) • Change and add backgrounds • Make sprites move different amounts of steps in different directions • Use different ways to start the code • Add sounds to sprites, including ones they record themselves • Make Sprites say things • Debug code a simple program	
Other coverage	Digital citizenship: Self-image and identity Online relationships Mechanics iPad	Digital citizenship: Online reputation Online bullying Systems and networks: Identify technology in the classroom and at school. Understand that information can be shared between connected devices Mechanics: Keyboard File management		Digital citizenship: Managing online information Health, well-being and lifestyle Systems and networks: Understand that digital devices have different purposes (input/output). Mechanics: Touchscreen Connections	
	Term 5			Term 6	
Big Idea	 Creating media – How can we change photos? Photos		 Programming – How do we make robots move? Ozobots - Lines		
Knowledge progression	• Navigate to the edit screen on photos • Use filters to change the appearance of photos • Crop, straighten and rotate photos • Use mark-up feature to draw and add things to photos • Begin to explore how the 'Adjust' features can change a photo and what they might be used for • Explain their choice of digital tools for their photo editing		• Calibrate an Ozobot independently • Use simple black lines to make an Ozobot follow a path • Use simple colour codes to make Ozobots speed up, slow down, turn and do some different moves (tornado / zigzag) • Use colour codes to program Ozobot to change speed • Program Ozobots to turn in certain directions at junctions and use U-turn codes.		
Other coverage	Digital citizenship: Privacy and security Systems and networks: Identify technology in the classroom and at school. Recognise that devices can be connected (wired or wireless) Understand that information can be shared between connected devices Mechanics: Touchscreen File management		Digital citizenship: Copyright and ownership Systems and networks: Understand that digital devices have different purposes (input/output). Recognise that devices can be connected (wired or wireless).		

Year 2

	Digital Citizenship							
	 Self-image and identity	 Online relationships	 Online reputation	 Online bullying	 Managing information online	 Health, well-being and lifestyle	 Privacy and Security	 Copyright and ownership
Knowledge progression	• I recognise that there may be people online who could make someone feel sad or upset. • I can give examples of when to speak to an adult if something happens that makes me feel sad, uncomfortable or upset.	• 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. • I can explain who I should ask before sharing things about myself or others online. • I can describe different ways to ask for, give, or deny my permission online and can identify who can help me if I am not sure. • I can explain that I have the right to say no and know who to ask for help if I feel pressured or unsure. • I can identify who can help me if something happens online without my consent	• 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.	• I can explain what bullying is, how it can happen, and how it might make someone feel. • I can explain that it is never the fault of someone who is being bullied. • I can explain ways to get help if someone is being bullied.	• I can use simple keywords in search engines. • I can demonstrate • how to navigate a simple webpage to get to information I need e.g. home, forwards, back, links, tabs and sections • I can explain what voice activated searching is and know it is not a real person e.g. Alexa, Google Now, Siri • I can explain the difference between things that are real and things that are made up. • I can explain why some information I find online may not be real or true	• I can explain simple guidance for using technology in different environments e.g. accessing online technologies in school and at home and how it helps.	• I can explain that passwords keep information, accounts, and devices safe. • I can recognise more detailed information that is personal to me. • I can explain why I should always ask a trusted adult before sharing personal information online, for myself or others.	• 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 / names so that others know if belongs to me. I understand that work created by others does not belong to me even if I save a copy.

	Mechanics					
	 Touchscreen	 Mouse and trackpad	 Keyboard	 File management	 Connections	 iPad
Knowledge progression	• Drag and drop with control • Rotate and resize object using touch gestures	• Right click functions • Select text using click and drag	• Use shift to access special characters • Type simple sentences with punctuation	• Open a document from a specific location • Rename a file	• Connect an input device using Bluetooth	• Take a screenshot using the iPad • Airdrop a photo to someone else • Scan a QR code to log in to an account

	Systems and networks			
	 Devices	 Internet	 Online safety	 Data
Knowledge progression	• Understand that a network connects devices so they can share information. • Recognise examples of networks in school (e.g. laptops connected to Wi-Fi and printers).	• Begin to understand that the internet connects many networks together.	• Recognise safe and responsible use of connected technology.	

	Term 1	Term 2	Term 3 & 4
Big Idea	 Creating media – How can we make a presentation on an iPad? Keynote	 Programming – Can you make a cat play basketball? Scratch Jr	 Programming – How do we make robots have a party? Ozobots – Blockly
Knowledge progression	• Create a new document • Add a range of pictures and shapes • Use the undo button to correct mistakes • Add, delete and move around slides • Format the slide to change the layout and background • Add transitions to slides • Play the presentation to show it to others	• Hide and show Sprites as part of the code • Use the repeat and repeat forever commands to repeat certain codes in order to achieve a certain goal • Use message command to make sprites start their code at different times • Make a Sprite speak at a certain time • Put a range of commands together to create a game / sequence of events • Predict what will happen in a code	• Connect an Ozobot to an iPad • Code an Ozobot to move in a range of directions at different speeds • Use a range of different movement commands • Include a range of light and sound effects • Put a range of codes together to make a sequence of events • Add a repeat loop on Level 2
Other coverage	Digital citizenship: Self-image and identity Online relationships Mechanics: Touchscreen Keyboard File management Systems and networks: Understand that a network connects devices so they can share information. Recognise examples of networks in school (e.g. laptops connected to Wi-Fi and printers).	Digital citizenship: Online relationships Online reputation Systems and networks: Recognise safe and responsible use of connected technology.	Digital citizenship: Online bullying Managing information online Systems and networks: Begin to understand that the internet connects many networks together.
	Term 5	Term 6	
Big Idea	 Creating media – How can computers to make music? GarageBand	 Data and information – How can computers to make music? J2E	
Knowledge progression	• Explore a range of different musical instruments and switch between them • Play different version of the same instrument and switch between them • Record sound from a range of different instruments and layer it together • Access songs saved previously and edit them	• Collect data from their class about different attributes • Make a pictogram online • Use pictograms to answer questions about data • Consider what data should and shouldn't be shared in pictograms	
Other coverage	Digital citizenship: Health, well-being and lifestyle Privacy and security	Digital citizenship: Copyright and ownership Mechanics: Keyboard File management iPad	

Year 3

 Digital Citizenship								
	 Self-image and identity	 Online relationships	 Online reputation	 Online bullying	 Managing information online	 Health, well-being and lifestyle	 Privacy and Security	 Copyright and ownership
Knowledge progression	- 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.	- I can describe ways people who have similar likes and interests can get together online. - I can explain how knowing someone online can be different from knowing them in real life and why I should be careful about who I trust. - I can explain that what is said or shared online can affect people's feelings. - I can explain why permission is important before sharing information, images, or videos online.	- I can explain how to search for information about others online. - I can explain what I can and cannot share online and why I need to be careful with personal information. - I can explain who someone can ask if they are unsure about putting something online.	- 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.	- I can use search engines and key phrases to find accurate information and explain how autocomplete can help. - I can explain how the internet can be used to buy and sell things. - I can explain the difference between beliefs, opinions, and facts, and that not all opinions online are true or fair. - I can describe ways to get help from a trusted adult if something online makes me feel upset or worried.	- I can explain why spending too much time using technology can sometimes have a negative impact on someone. - I can give some examples of both positive and negative activities where it is easy to spend a lot of time online (e.g. doing homework, games, films, videos). - I can explain why some online activities have age restrictions, why it is important to follow them - I know who I can talk to if others pressure me to watch or do something online	- I can describe simple ways to create strong passwords and keep them private. - I can explain why we should only share information with people we trust and tell a trusted adult if we feel unsure or pressured. - I can describe how connected devices can collect and share information with others.	I can explain why copying someone else's work from the internet without permission isn't fair and may cause problems.

	Mechanics					
	 Touchscreen	 Mouse and trackpad	 Keyboard	 File management	 Connections	 iPad
Knowledge progression	Switch efficiently between apps and windows	- Use cursor accurately for resizing, selecting and highlighting - Understand different cursor icons	- Know the home row keys and type words with them using the correct finger for each letter - Use correct fingers to type other near keys (e, i, r, u) - Use keyboard shortcuts for copy and paste	- Create folders for saving work - Understand file icons and file types		- Delete items and recover them - Scan a QR code to navigate to a website - Switch efficiently between different apps - Airdrop a range of different files and links

	Systems and networks			
	 Devices	 Internet	 Online safety	 Data
Knowledge progression	Understand that networks can connect devices in different locations.	Recognise that the internet allows people to share and communicate globally.	Begin to understand that online information should be used thoughtfully.	Understand that information travels digitally as data.

	Term 1	Term 2	Term 3 & 4
Big Idea	 Creating media – How can we make a presentation come alive? Keynote	 Programming – How are computer games made? Swift Playgrounds / Hopscotch	 Creating media – How can we turn our ideas into an animation? Stop Motion Studio Pro
Knowledge progression	• Add a range of different features to a Keynote including a range of layouts • Use a range of animations for objects including precise motion paths • Add videos from the internet and format videos to play across multiple slides	• Use Swift Playgrounds to learn about Commands, For Loops and Conditionals • Learn how to add a character and give it commands in Hopscotch • Start the code in a range of different ways • Use simple codes to move and turn with different speeds and angles • Use conditionals in Hopscotch to add a command when character bumps into something • Use controls to add loops	• Add, edit and move around photos to create a stop motion film • Add pauses, sound effects and theme music • Edit speed, transitions and playback of movie • Draw and edit images into the movie, using the erase function to get rid of unwanted parts • Merge frames to simulate fast movement • Add titles, credits and theme cards • Use green screen / blue screen
Other coverage	Digital citizenship: Self-image and identity Online relationships Mechanics: Touchscreen Keyboard File management Systems and networks: Internet	Digital citizenship: Online reputation Online bullying Systems and networks: Data	Digital citizenship: Managing information online Health, well-being and lifestyle Mechanics: Touchscreen iPad
	Term 5		Term 6
Big Idea	 Creating media – How are websites designed? Adobe Express		 Programming – How can machines be coded to help us out? Lego WeDo
Knowledge progression	• Add photos from a range of places • Add and format text • Add videos from the internet • Explore different layout options • Use buttons as hyperlinks • Add a Glideshow to add extra information in a different way • Include videos and pictures made themselves to enhance the web page		• Follow steps to build and code a robot using instructions – build Milo • Code the motor block to work in different ways and at different speeds • Add different codes to the robot including colour changes and their own sounds • Use motion and tilt sensors and code them to work in different ways – build Milo motion and tilt sensor • Add different code to the robots including loops • Adapt Milo with different coding to do a particular role
Other coverage	Digital citizenship: Privacy and security Mechanics: Touchscreen Keyboard File management iPad		Digital citizenship: Copyright and ownership Systems and networks: Devices Internet Online safety

Year 4

	Digital Citizenship							
	 Self-image and identity	 Online relationships	 Online reputation	 Online bullying	 Managing information online	 Health, well-being and lifestyle	 Privacy and Security	 Copyright and ownership
Knowledge progression	- 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. - I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.	- 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 describe how to recognise healthy and unhealthy online behaviours - I can explain that content shared online may affect people in different ways.	- 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.	- 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 how what I post online can affect others and my reputation.	- I can search for information using different technologies and judge whether it is probably accurate, making my own decisions about content. - I can recognise ways technology is used to encourage people to buy things online and describe some examples. - I can explain that just because many people share the same opinions or beliefs online, it does not make them true. I can explain how technology can act like or impersonate living things, and describe some benefits and risks.	- 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 and can suggest strategies to help with this.	- I can describe strategies for keeping personal information private in different situations. - I can explain that internet use is never fully private and may be monitored by adults. - I can describe how online services may ask for consent to store information and know how to respond or ask for help if unsure. - I can explain the digital age of consent and how it affects online services asking for information.	- 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 reuse it. - I can give some simple examples of content which I must not use without permission from the owner e.g. music, videos, images

	Mechanics					
	 Touchscreen	 Mouse and trackpad	 Keyboard	 File management	 Connections	 iPad
Knowledge progression			Use the correct fingers to type all keys above the home row (t, y, w, o, q, p)	- Move and copy files between folders - Delete files	Name different types of connection and their common uses (USB A, USB C, audio jack, lightning, HDMI, micro USB)	- Use the multitasking menu to use split view and slide over - Use the Files app to locate and organise work - Copy and paste text images and files across apps

	Systems and networks			
	 Devices	 Internet	 Online safety	 Data
Knowledge progression		Recognise that the internet provides multiple services (web, email, streaming).	- Understand that information online may vary in reliability. - Know how to use online tools safely and responsibly.	Understand that data is transferred across networks.

	Term 1	Term 2	Term 3
Big Idea	 Data and information – How can we organise important information? Numbers	 Programming – How are computer games made? Swift Playgrounds / Scratch	 Creating media – What does it take to be a movie director? iMovie
Knowledge progression	• Create a simple table using data on Numbers • Change the format of a cell including using different data e.g. money and pop-up menu • Use the data to create a range of different graphs and charts, choosing the most appropriate for the data • Use basic formula to enter data including SUM, MAX and MIN • Use Autofill Cells to fill down a formula to put it in multiple cells	• Use Swift Playgrounds to learn about Functions • Learn how to change and code Sprites and backgrounds in Scratch • Learn how to use conditionals, loops and functions in Scratch • Adapt a game to include a function (Slug Trail) • Create a game using loops, conditionals and functions	• Insert different videos, trim them, split them and detach audio • Change the speed and volume of a video clip • Add text using a range of title styles • Use sound effects and background music at specific points • Add a voiceover • Include pictures and adjust their movements • Use transitions between video clips
Other coverage	Digital citizenship: Self-image and identity Online relationships Mechanics: Keyboard File management iPad Systems and networks: Data	Digital citizenship: Online reputation Online bullying Systems and networks: Data	Digital citizenship: Managing information online Mechanics: Touchscreen iPad Systems and networks: Online safety
	Term 4	Term 5	Term 6
Big Idea	 Programming – How can computers send messages? Micro:bits	 Programming – Can a robot do an obstacle course? Ozobots - Blockly	 Creating media – What makes a successful podcast? WavePad / Radio station
Knowledge progression	• Link Micro:bit to iPad and send code to it • Use MakeCode editor to use a range of different inputs to produce results • Use conditionals and loops to create a code on the Micro:Bit • Use radio function to send messages to each other	• Program Ozobots to move in different ways including using sounds, light and a range of movements • Use sensors with conditionals to get Ozobots to avoid objects in their path • Use loops to repeat movements • Use logic for conditional commands, including 'else' function	• Record a range of audio clips and put them together • Split and remove un-wanted audio sections • Edit the volume of the audio in a range of different ways, including removing background noise • Change the speed and pitch of voices, including using voice effects
Other coverage	Digital citizenship: Health, well-being and lifestyle Mechanics: Connections Systems and networks: Internet	Digital citizenship: Privacy and security Mechanics: Connections Systems and networks: Data	Digital citizenship: Copyright and ownership Mechanics: Connections Systems and networks: Internet Online safety

Year 5

	Digital Citizenship							
	 Self-image and identity	 Online relationships	 Online reputation	 Online bullying	 Managing information online	 Health, well-being and lifestyle	 Privacy and Security	 Copyright and ownership
Knowledge progression	- I can explain how identity online can be copied, modified or altered. - I can explain how to make responsible choices about having an online identity, depending on context.	- I can identify examples of how technology is used to support education and learning. - I can explain that some people I meet online may intend harm and understand that this is never my fault. - I can describe how people participate and collaborate positively in online communities. - I can explain how to seek help and recognise when to tell a trusted adult about online problems. - I can demonstrate ways to offer support and kindness to others online.	- I can search for information about an individual online and summarise the information found. - I can explain how information online can be used to judge someone and why these judgements may be wrong.	- I can recognise online bullying can be different to bullying in the physical world and can describe some of those differences. - I can explain how joking, teasing, or 'banter' online can be experienced as hurtful by others and why it may be considered bullying. - I can describe ways to get help, report concerns, and know when to tell a trusted adult. - I can explain how to block abusive users and identify helplines that can support people experiencing bullying.	- I can explain the benefits and limitations of different search technologies and how they can influence the information I see. - I can explain what it means to be sceptical and evaluate digital content to decide what is trustworthy. - I can explain key concepts such as fact, opinion, belief, validity, reliability, and evidence. - I can identify ways the internet can guide people towards information for different agendas.	- I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively. - I recognise the benefits and risks of accessing 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, lootboxes) and explain the importance of seeking permission from a trusted adult before purchasing.	- 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 with others. - I can explain what app permissions are and can give some examples.	- I can access 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.

	Mechanics					
	 Touchscreen	 Mouse and trackpad	 Keyboard	 File management	 Connections	 iPad
Knowledge progression			Use the correct fingers to type all keys below the home row (v, m, b, c, ,)	- Understand cloud storage vs local storage - Share files appropriately	Connect a device to a secondary screen in different ways (AirPlay, USB C, HDMI)	- Troubleshoot common iPad issues - Use appropriate accessibility functions to improve user experience - Annotate screenshots or documents using Markup

	Systems and networks			
	 Devices	 Internet	 Online safety	 Data
Knowledge progression		Recognise that the internet and the World Wide Web are different but connected.	- Understand that not all online information is accurate or reliable. - Use online services (e.g. email, cloud storage, shared documents) purposefully.	

	Term 1		Term 2	
Big Idea	 Programming – How do computers make decisions? Swift Playgrounds / Scratch		 Programming – Should we trust self-driving cars? Ozobots Blockly	
Knowledge progression	• Use Swift Playgrounds to learn about operators • Understand comparison and logical operators • Use operators in Scratch to edit a game and add them in • Design own game using operators in Scratch		• Use level 4 of Blockly to code Ozobots • Create own functions for Ozobots to use • Use logic for operators including AND and OR • Program Ozobot to be a self-driving car including using sensors and surface colours • Create own variables including speed and proximity threshold • Create a testing simulation for Ozobot to be a self-driving car with a range of hazards	
Other coverage	Digital citizenship: Self-image and identity Online relationships Mechanics: Keyboard iPad		Digital citizenship: Online reputation Online bullying Mechanics: Keyboard iPad Systems and networks: Online safety	
	Term 3 & 4		Term 5	Term 6
Big Idea	 Programming – How can light sensors control real world objects? Lego WeDo / Scratch	 Creating media – What makes a good website? Google Sites	 Creating media – How is movie magic made? iMovie	
Knowledge progression	• Understand how to code a range of sensors in Lego Wedo for different purposes • Create a code for a distance sensor in Scratch using conditionals, operators and loops • Build and code a car park barrier that will lift when a car approaches and close again once the car has left • Code the car park barrier to display a certain colour when an object is between a certain distance away using an operator and then open		• Insert a range of web pages and content including pictures and text • Use a range of themes to change the appearance of the web page • Use a range of features of a website include buttons, image carousels, videos and other web content • Make a full web page linked together that serves a purpose	• Use Green/Blue screen feature • Use Cutaway feature to use the video from one clip with the audio from another • Use Picture in Picture and Split Screen features
Other coverage	Digital citizenship: Health, well-being and lifestyle Managing information online Systems and networks: Online safety		Digital citizenship: Privacy and security Mechanics: Connections File management Systems and networks: Internet	Digital citizenship: Copyright and ownership Mechanics: File management iPad

Year 6

	Digital Citizenship							
	 Self-image and identity	 Online relationships	 Online reputation	 Online bullying	 Managing information online	 Health, well-being and lifestyle	 Privacy and Security	 Copyright and ownership
Knowledge progression	- 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 describe issues online that could make anyone feel sad, worried, uncomfortable or frightened. I can give examples of how to get help, both on and offline. - I can explain the importance of asking until I get the help needed.	- I can explain that sharing content online can have positive or negative effects on others. - I can describe how to show kindness and respect online, including respecting boundaries and supporting others if they are treated unfairly. - I can explain that private content shared online can have unintended consequences, such as being shared without permission. - I can explain the risks of taking or sharing inappropriate images, even with consent, and know who to talk to if I or someone else is worried.	- I can explain how to create and maintain a positive online reputation. - I can describe strategies to protect my digital identity, including using different levels of anonymity.	- 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.	- I can describe how search engines work, how results are ranked, and how to use them effectively. - I can explain that some online information is opinion, why opinions may be presented as facts, and why popularity or authority does not make them true or fair. - I can define influence, manipulation, and persuasion, and explain how these can be encountered online. - I can explain how persuasive design can be used to influence people's choices.	- I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. - I can discuss the pressures that technology can place on someone and how / when they could manage this. - 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).	- I can describe ways to manage passwords safely and explain what to do if a password is shared, lost, or stolen. - I can explain why it is important to keep software and apps up to date and how to do this. - I can describe ways to increase privacy on apps and online services. - I can describe how some online content targets people to gain money or information illegally and explain strategies to identify scams or phishing. - I know that online services have terms and conditions that govern their use.	- I can demonstrate the use of search tools 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.

	Mechanics					
	 Touchscreen	 Mouse and trackpad	 Keyboard	 File management	 Connections	 iPad
Knowledge progression			• Use the correct fingers to make the last five keys and make capitals letters using the shift key (x, z, ', / .) • Use a keyboard confidently across a variety of devices (desktop, laptop, touchscreen devices)	• Understand basic file formats and compatibility	• Troubleshoot simple connection issues • Select appropriate cables and connections for a task	

	Systems and networks			
	 Devices	 Internet	 Online safety	 Data
Knowledge progression	• Understand that online collaboration allows people to share and work together in real time. • Recognise how information is stored and shared using cloud-based tools.		• Know how to communicate and collaborate safely and respectfully online. • Reflect on the opportunities and risks of an increasingly connected world.	

	Term 1	Term 2
Big Idea	 Programming – How do computer games decide who wins? Swift Playgrounds / Scratch	 Programming – How can we code Lego in different ways? Lego WeDo / Scratch
Knowledge Progression	• Use Swift Playgrounds to learn about Variables (Learn to Code 2) • Use variables in Scratch to create a quiz • Add a score to a game using variables • Create own game using variables, operators, functions and loops	• Understand the tilt switch and how it outputs a number when tilted in a certain direction • Create a code for the tilt switch in Scratch using conditionals / operators • Design and build a model and code that uses the tilt switch to control an on-screen programme
Other coverage	Digital citizenship: Self-image and identity Online relationships Mechanics: Keyboard	Digital citizenship: Online reputation Online bullying Mechanics: Keyboard Connections
	Terms 3 & 4	Terms 5 & 6
Big Idea	 Data and information – How can we present data in different ways? Numbers	 Programming – How can coding improve our lives? Micro:bits
Knowledge Progression	• Explore the different cell formats and come up with ways to be used • Use more complex formula and link to operators and conditionals from coding – IF, AND, OR, NOT • Use 'COUNTIF' to get Numbers to find which cells return a certain condition • Explore different cell types to display data as decimals and percentages	• Understand how python code works • Be able to use python to code the Micro:bit to carry out simple commands • Create a code in python and explain it • Give children a range of the features Micro:bit can do and get them to design their own using blocks but then look at it in python • Link to DT to come up with an invention
Other coverage	Digital citizenship: Managing information online Health, well-being and lifestyle Mechanics: File management Systems and networks: Devices	Digital citizenship: Privacy and security Copyright and ownership Mechanics: Connections Systems and networks: Online safety

Resource usage:

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Beebots	Year 1					
Ozobots		Year 5	Year 2	Year 2	Year 4	Year 1
Lego WeDo		Year 6	Year 5	Year 5		Year 3
Class set iPads					Year 6	
Laptops		Year 6			Year 4	