



St Barnabas

Church of England Primary Academy

A member of **CDARI**

**'That they shall have life,
life in all its fullness!'** John

10:10

**'Achieving great things through
learning and growing together
in a love-filled Christian family'**

Computing Curriculum Overview 2025-2026

Junior Jam - iMedia

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	iCommunicate Lite 1 - iSkills Pupils will learn the correct names of computer components and how to use them effectively. They will explore information technology, understanding its role in schools and the wider world. Through real-life examples—such as schools, shops, hospitals and the police—they will examine the choices we make and the responsibilities that come with using technology. The pupils will become 'Tech Explorers', going on a digital treasure hunt to unlock new technology each lesson. Pupils will also learn a new	iProgram - Lite L1 - iCode During iCode pupils will use games to learn key coding skills. The course will start by looking at everyday tasks and thinking about the thought behind a series of problems within the app 'Kids Coding'. This will culminate in students learning how to use more complex coding apps for their age like Hopscotch and using the word algorithm with ease. <u>Key Vocabulary:</u> Computer, Algorithm, Coding, Repeats, Conditional, Function	iSecure Lite L1 - iSafe Pupils will learn the fundamentals of the internet and digital device safety. They will be introduced to different real-life scenarios and develop different strategies to stay clear of or to deal with potential situations that could arise when online. Pupils will be reminded each lesson about the correct procedures to follow and who they can talk to should they have any concerns regarding e-safety. <u>Key Vocabulary:</u> E-safety, Cyberbullying, Passwords, Personal	iCreate - Lite L1 - iMove During iMove, pupils will learn about 'Stop Motion' animation. They will gain a number of animating skills to create their own stop motion animations on an iPad. Pupils will have to create a plot and overcome the challenges involved in animating multiple objects and characters within each frame. <u>Key Vocabulary:</u> Stop Motion, Animation, 2D/Hand-drawn, Frame, Quality control, Movement.	iJam Lite L1 - iLoop This is an introduction to basic song writing skills using the app 'GarageBand'. Students will work initially as a class creating a class song before moving into pairs or small groups to create a short composition using a variety of instruments and sounds available within the Apps. <u>Key Vocabulary:</u> Tempo; Structure; Introduction; Verse; Chorus; Breakdown/Bridge; Outro; Duplicate; Critique; Producer; Music Production; Instrumentation; Texture; Fade and Editing.	iTech - Lite L1 - iInvent Pupils will learn about the history of the invention and how it has changed from the date of its invention to now, both in appearance and in its capabilities. Pupils will also look at why some of these inventions have become obsolete. Pupils will look at the advantages each invention brought at the time of its invention, and up to the present if it is still used. <u>Key Vocabulary:</u> Technology, Camera, Phonograph, Morse Code, Telegraph, Television,

	feature of their iPads each week to build up their skill set. Key Vocabulary: Computer, Information Technology, Software, Hardware, Applications, System, Responsibility, Icons, Users, E-safety		information, Trust, Pop-ups, Gaming, Private/Privacy, Avatar.			Computer, ENIAC (Electronic Numerical Integrator and Computer), Telephone, Operator.
Year 2	iCommuniatate Lite 2 - iTools During iTools, pupils will look at all the different tools that can use to contact someone in this digital era. The class will explore and discuss the reasons why people may wish to connect with others both around them and far away. Pupils will create multimedia communications to send to a recipient. Pupils will recap important aspects of iTech Lite Level 1 (if studied) regarding the technology we use to communicate with people in the 21st century. Key Vocabulary: Communication, Connect/Connection, Emails, Voice note, Text message	iProgram Lite L2 - iBlockly Pupils will get introduced to the world of Blockly, a simple programming language. Pupils will learn how to use it to create their own code, whilst thinking about conditionals, functions and using randomisation. They will also be challenged on their accuracy in creating and copying code, as well as finding and fixing any errors. Key Vocabulary: Programming, Blockly, Algorithm, Conditional, Function, Random, Animation, Draw A Trail.	iSecure Lite L2 - iConnect iConnect introduces pupils to the concept of data while developing essential skills in digital literacy and e-safety. Through fun and engaging lessons, pupils will explore how data is collected, used, and shared, gaining the ability to interpret and manage information responsibly. The course encourages critical thinking about online interactions, helping pupils recognise how others connect with them digitally and make informed decisions about the information they share. By demonstrating what safe and responsible technology use looks like, iConnect equips pupils with the knowledge and confidence to navigate the	iCreate - Life L2 - i2D This course focuses on 2D and hand-drawn animation. Pupils will learn how to bring two dimensional drawings to life through use of the app 'Do Ink Animation'. They will animate a given story line on 'Scratch Jr', mixing coding into their creativity, as well as creating their own animated LEGO figure and finally create a Flip book. Key Vocabulary: Flip book, Animation, 2D/Hand-drawn, 3D/Computer-generated, Frame, Quality control, Movement.	iJam Lite L2 - iGenre Pupils will learn about a selection of different styles of popular music from the past 60 years and be tasked with creating their own versions using the app 'GarageBand'. Pupils will learn how to recognise different instruments and sounds associated with different genres. Key Vocabulary: Genre; Hip – Hop; Blue; Rock 'n' Roll; World; Filters	iTech - Lite L2 - iFilm Pupils will use Scratch Jr as a method of storyboarding as well as learning how to use two new apps within this course, Toontastic and iMovie. While using those two apps, pupils will put storyline and arc knowledge together with their learning about new camera angles to create interesting cartoons and movie trailers. Key Vocabulary: Film, Camera angles, Long shot, Medium shot, Close-up shot, Landscape, Group shot, Arc, Plot, Storyline, Three-point Arc (Beginning, Middle & End), Five-point Arc (Setup, Conflict, Challenge, Climax & Resolution), Cartoon, Trailer, Storyboard.

			digital world with awareness and care. Key Vocabulary: Data, Information, Online Safety, Personal Data, Connect, Encryption, Sorting Data, E-Safety, Data Handling, Data Collection, Problem-Solving			
Year 3	iCommunicate L1 - iCollaborate This module focuses on podcasting, blogging, vlogging and broadcast channels. Pupils will look at the origins of these four areas before learning how to create their own. Pupils will also discuss how digital networks such as the internet have made remote collaborations possible and very easy. Key Vocabulary: Podcast, Blog, Vlog, Auto-Bar, Collaboration/Collaborate, Content, Episodical, Channel, Audience, Viewers, Listeners Ident, Dead Air.	iProgram L1 - iLogic Pupils will use games to learn key coding skills. They will learn how to use the coding language 'Blockly' to introduce key programming elements such as functions, loops, conditionals and variables. This will progress into using code to create 'Spirograph' style artwork and creating a modern version of an Etch-A-Sketch. Key Vocabulary: Algorithm, Computer Science, Programming, Blockly, Conditional, Variable, Binary, Computer Scientist, LED, Repeat, Angle	iSecure L1 - iSafety Pupils will combine learning how to stay safe while on a digital device with learning how to operate Office 365 programs. Our E-Safety module covers Cyberbullying, Online Gaming, Trust, Digital Reputation, Location Permissions, Online Contact and Social Media. All of these topics are covered alongside learning how to use the basic functions within word and spreadsheet processors. Key Vocabulary: Recipient, Format, WAN, LAN, Network, Cyberbullying, Online Gaming	iCreate L1 - iStop Motion Throughout iStop Motion, pupils will learn about five different types of animation before continuing the rest of the course using solely Stop Motion. Pupils will learn multiple techniques to complete a short animation by the end of the course. Pupils will learn about Chroma Key and Sound FX before adding these techniques to their animation to create a finished piece. Key Vocabulary: Stop Motion, 2D, 3D, Computer-generated, Motion Capture, FPS (Frames per second), Frame, Green screen, Chroma Key, Sound FX, Foley/Foley Artist.	iJam L1 - iSong This is an introduction to basic song writing skills using the GarageBand app. Pupils will work in pairs or small groups to create a short composition using a variety of instruments and sounds available in the app. Tempo will be addressed, both in relation to musical genre and how it affects the feel and impact of a song. Musical and rhythmical patterns will be developed, and pupils will appraise each other's work with a view to implementing changes and improving their compositions. Key Vocabulary: Tempo; Structure; Introduction; Verse; Chorus; Breakdown/Bridge; Outro; Duplicate; Critique; Producer; Music Production;	iTech - iCSI Evidence Trace Throughout iTech Level 2 iCSI pupils will learn how technology is used within police departments and links teams to help them solve crimes. Pupils will know how fingerprints are taken, and how they can be used. They will take samples of their own fingerprints and analyse a fingerprint database to see if they can match their prints. Pupils will learn about evidence logging databases, Photo Fit IDs, GPS tags and how to present information. Key Vocabulary: Crime Scene; CSI; Reconstruction; EvoFit; Eyewitness; Reliability; Case Summary; Witness Statement; Mind Maps; Evidence; GPS Tag;

					Instrumentation; Texture; Fade; Editing; word processing; press release and functions.	Motive; Floor Plan; Fingerprints (Whirl, Loop, Arch, Accidental, Composite, Tented Arch, Patent/ Latent).
Year 4	iCommunicate L2 - iIntelligence Pupils will explore the big question for the half term: "Can computers think?" They will learn about the different generations of artificial intelligence and how it has developed into the technology we know today. Pupils will examine the role of AI in their everyday lives, often used without them even realising, and reflect on whether they believe AI is a positive or negative force in society. In addition, they will gain an understanding of how AI is coded and begin to use similar functions to create their own basic AI systems. <u>Key Vocabulary:</u> AI (Artificial Intelligence), Machine Learning, Data, Chatbot, Eliza (the 1st Chatbot), Sophia (The First	iProgram L2- iFunction Pupils will learn how to understand each function and if they combine many of the functions, they can create a bigger, more powerful algorithm for many uses. They will learn about different types of functions and their role in an algorithm. <u>Key Vocabulary:</u> Programming, Swift, Blockly, Algorithm, Function, Variable, Random, Repeat, Computational Thinking, Decompose, Pattern, Abstraction, Conditional.	iSecure L2 - iSocial Pupils will be presented with a hypothetical scenario where all social media platforms have been removed from the internet. They will then be tasked with designing and creating their own social media platform to fill the gap in the market. Throughout the half term, pupils will use more advanced functions in word processors to plan their ideas before finally collating them into a keynote ready to be presented to their peers. <u>Key Vocabulary:</u> Word Processing, Edit, Highlight, Strikethrough, Centre, Align Left, Align Right, Centre, Justify, Target Market, Audience, Pitch, Presentation.	iCreate L2 - iEdit Pupils will learn basic and advanced editing techniques and video effects to produce a music video. Pupils will edit, cut and splice footage supplied to them in order to create their final video. They will learn how to Splice, Cut, Trim, add sounds, record their own voice, add text over video and build in transitions. <u>Key Vocabulary:</u> Fast Cutting, Camera angles, Long/Mid/Close-up Shot, Cutting, Editing, Splicing, Cue sheets, Fan Video, Pre-Production, Post-production.	iJam L2 - iDance Participants will begin listening to a variety of popular dance music styles and analysing key elements that distinguish one genre from another. These findings will then be applied when students create a short composition in their chosen genre. Elements such as dynamics and pitch will be explored and applied to the compositions. The concept of the 'Audio Spectrum' will be introduced and participants will begin to use stereo-panning and level controls to improve their music's balance and texture. <u>Key Vocabulary:</u> Genre; Dance (music); House (music); Dubstep (music); Drum and Bass (music); Drum Machine; BPM (Beats per minute); Synthesisers.	iTech - iCSI Evidence Trace Throughout iTech Level 2 iCSI pupils will learn how technology is used within police departments and links teams to help them solve crimes. Pupils will know how fingerprints are taken, and how they can be used. They will take samples of their own fingerprints and analyse a fingerprint database to see if they can match their prints. Pupils will learn about evidence logging databases, Photo Fit IDs, GPS tags and how to present information. <u>Key Vocabulary:</u> Crime Scene; CSI; Reconstruction; EvoFit; Eyewitness; Reliability; Case Summary; Witness Statement; Mind Maps; Evidence; GPS Tag; Motive; Floor Plan;

	Humanoid), Humanoid, Prompts, Scraping.					Fingerprints (Whirl, Loop, Arch, Accidental, Composite, Tented Arch, Patent/ Latent).
Year 5	iCommunicate L3 - iAdvertise Pupils will be introduced to advertising across three different mediums: Print, TV and Radio. Participants will learn how to create radio adverts and sonic branding to suit different products and themes, as well as creating an advert for a new product and slogan for their product. The outcome will be for pupils to have a series of works surrounding the advertisement industry. Pupils will look at collaborations of different departments in the same company to make a rounded campaign. <u>Key Vocabulary:</u> Branding, Visual Branding, Jingle, Brief/Design Brief, Sonic Branding, Marketing, Distribution, Slogan, Customer, Consumer, Target Market, Select Targeting.	iProgram L3 - iDebug Pupils will know how to effectively debug their own work, how to spot errors in the code and have enough knowledge to know how to change it. They will also have an understanding of real-world programming solutions. Pupils will create shapes to learn the basics of programming, then move onto fixing or 'debugging' existing computer programs. <u>Key Vocabulary:</u> Algorithm, Bug, Debug/Debugging, Branch, "Real-World Programming"; Conditional, Variable, Endless Runner.	iSecure L3 - iCompany iCompany is a spreadsheet-based course. Pupils will begin with a recap of basic spreadsheet knowledge gained in Level 1 before moving on to more advanced functions within the app. Their task is to act as movie producers and decide on a style of animated movie to put into production. Working in pairs, pupils will start by inputting and analysing data allowing them to make important production decisions. The class will develop their spreadsheet skills and learn how to successfully use a variety of advanced functions within a spreadsheet. <u>Key Vocabulary:</u> Workbook, Spreadsheet, Formulas/Formulae, Total/s, Cells, Rows, Column, Data, Inputting, Filter, Budget, Data Entry/Extraction.	iCreate L3 - Advanced i2D Pupils will learn to refine the skills learnt in i2D. This course includes more detailed hand-drawn animation and teaches the pupils to create more rounded pieces including backgrounds and movement pathways. Pupils will focus on character design, plot development and how characters interact. <u>Key Vocabulary:</u> Flip book, Hand Drawn, Squash and Stretch, Motion Pathways, Composite, Two Dimensional, Vector Art.	iJam L3 - iHip-Hop This workshop focuses on the origin and progression of Hip- Hop as a musical movement. Students will study the basic elements of the genre and develop their sampling and audio editing skills to create their own original Hip-Hop track. As well as using 'GarageBand', other Apps will be introduced so participants can add their own drum rhythms, loops and sampled sounds to their compositions. Students will progress to creating lyrics to rap, speak or sing accompanying their tracks. <u>Key Vocabulary:</u> MC; DJ; DJ Kool Herc; Rap; Nu Skool (New school); Old Skool (Old School); Synthesisers; Genre; Grand Master Flash; Sampling; Hook.	iTech - iCSI Evidence Trace Throughout iTech Level 2 iCSI pupils will learn how technology is used within police departments and links teams to help them solve crimes. Pupils will know how fingerprints are taken, and how they can be used. They will take samples of their own fingerprints and analyse a fingerprint database to see if they can match their prints. Pupils will learn about evidence logging databases, Photo Fit IDs, GPS tags and how to present information. <u>Key Vocabulary:</u> Crime Scene; CSI; Reconstruction; EvoFit; Eyewitness; Reliability; Case Summary; Witness Statement; Mind Maps; Evidence; GPS Tag; Motive; Floor Plan; Fingerprints (Whirl, Loop, Arch, Accidental, Composite, Tented Arch, Patent/ Latent).

Year 6	iCommunicate L4 - iGraphics Participants will work to design and create a new website for Junior Jam. Students will be given design briefs to follow which will aid the design process. The websites will include elements of HTML coding as well as using a WYSIWYG developing app to help visualise their designs. The websites must include several different elements including a video game that students must also design and create as part of the course. <u>Key Vocabulary:</u> HTML – Hypertext Markup Language, Pixels, RGB colour, WYSIWYG, Design Brief, Target Audience, Header banner, Navigation bar, the four C's (Challenge, Choice, Change and Chance), Market research and Focus group.	iProgram L4 - iDevelop Pupils will be able to code their own programs, starting with simple shapes and art pieces to progressing to musical instruments and games. They will be able to code for an external object and feel confident in alternating between Blockly and written coding languages. <u>Key Vocabulary:</u> Blockly, Swift, Function, Algorithm, Conditional, Last Touch, Create A Clone, Variable, Check Once If, JavaScript.	iSecure L4 - iCV Pupils must use all the skills they have learnt during Levels 1, 2 and 3 on Keynote and the word and spreadsheet processors, to design and present their own superhero. Pupils will learn how to create and correctly format a CV, how to add hyperlinks into a word processing document and extrapolate data from GarageBand in order to design a successful candidate CV. <u>Key Vocabulary:</u> CV, Hyperlink, Extrapolate, Data, Build Order, Presentation, Data Bank, Candidate, Employer, Employee.	iCreate L4 - iDigital Pupils will learn how to film from different camera angles and edit them together. They will learn about storyboarding and how vital they are to the planning process. They will learn how to create Cinemagraphs and 3D models. Pupils will also be expected to create a Digital Gallery of their work. <u>Key Vocabulary:</u> Fast Cutting, Storyboard, Multimedia, Content, Pathways, Anchor, Take, GIF (Graphic Interchange Format), Cinemagraph.	iJam L4 - iRemix Throughout iRemix pupils will be learning all about remixing and sampling. They will look into a number of different ways to remix a song each lesson. They will try adding vocal effects to stems, creating live loops and layering them, as well as changing the genre of a song to something unexpected. During the final few sessions the pupils will create their own remix of a song of their choosing. <u>Key Vocabulary:</u> Remix; Sampling; Royalties; Genre; Copyright; Song writing; Original; Vocal Stem; Beatboxing	iTech - iCSI Evidence Trace Throughout iTech Level 2 iCSI pupils will learn how technology is used within police departments and links teams to help them solve crimes. Pupils will know how fingerprints are taken, and how they can be used. They will take samples of their own fingerprints and analyse a fingerprint database to see if they can match their prints. Pupils will learn about evidence logging databases, Photo Fit IDs, GPS tags and how to present information. <u>Key Vocabulary:</u> Crime Scene; CSI; Reconstruction; EvoFit; Eyewitness; Reliability; Case Summary; Witness Statement; Mind Maps; Evidence; GPS Tag; Motive; Floor Plan; Fingerprints (Whirl, Loop, Arch, Accidental, Composite, Tented Arch, Patent/ Latent).
--------	--	--	---	--	---	---