

Computing Curriculum Map 2017-18



	Start of Year Focus:	Computer Science Focus (units for 3 half terms):	Information Technology Focus (recommended Cross Curricular across the year – minimum 2 half terms): Can be whole class, group or targeted pupils			
Year 1	<p>Housekeeping: Logging onto computers/devices</p> <p>Using LGfL username and password (USO) in school and at home</p> <p>Accessing subscription services such as Google Classroom.</p> <p>How to navigate iPads apps including seesaw.</p>	<p>Programming: Islington SoW Unit 1 Bee-bots</p> <p>Code.org</p> <p>Islington Unit 2 (onscreen turtles using resources on LGfL such as Busy Things)</p>	<p>Multimedia & Word processing Creating simple text and images focusing on skills: Locating letters, space bar, full stops, shift to enter capital letters, backspace to delete.</p> <p>Busy Things</p> <p>Focus on correctly opening application, saving work, opening a saved file</p>	<p>Communication & Collaboration Online research for topic using child-friendly search engines.</p>	<p>Digital Media Graphics: Create digital artwork Pic Collage</p> <p>Audio: Create audio to accompany a graphic. Create/explore music LGfL Busy Things</p>	<p>Data Collect information to answer a question about the class. Create pictogram, LGfL JiT</p>
Switched On Online Safety	<p>Unit 1.1 - We are Year 1 rule writers Creating rules that help us stay safe online</p>	<p>Unit 1.2 – We are kind and thoughtful Understanding the impact of our behaviour on others</p>	<p>Unit 1.3 – We are responsible internet and device users Remembering to take time out from technology</p>	<p>Unit 1.4 – We are information protectors Understanding what is meant by personal information</p>	<p>Unit 1.5 – We are good digital citizens Finding out what it means to be a good digital citizen</p>	<p>Unit 1.6 – We are responsible gamers Learning how to stay safe when playing online games</p>
Barefoot Computing	Bee-Bot Tinkering	Bee-Bot Basics/SEND: Bee-Bot Basics	Bee-Bot Programming Crazy Character Algorithm	SEND: Bee-Bot Route Decomposition	SEND: Creating Patterns Activity	SEND: Sorting Objects Activity



<p>Year 2</p>	<p>Housekeeping: Logging onto computers/device</p> <p>Using LGfL username and password in school and at home</p> <p>Accessing subscription services such as Google Classroom.</p> <p>How to navigate iPad apps including seesaw.</p>	<p>Programming: Islington Unit 1 (Pro-bots)</p> <p>Code.org</p> <p>Islington Unit 2 (Onscreen turtles using LGFL resources, including iBoard, JIT, Busy Things)</p>	<p>Multimedia & Word processing creating story boards, comics, etc. LGfL Jit, Book Creator, Busy Things)</p> <p>Focusing on skills: Changing font size, type colour, Inserting images. Create a simple multimedia book: Inserting images and audio/video Seesaw app/ Pic Collage</p>	<p>Communication & Collaboration Blogs: simple contributions, text& pictures, check before posting</p>	<p>Digital Media Graphics: Create artwork. Pic Collage app Animation: Create a simple animation in JiT (LGfL)</p>	<p>Data Design and collect information for a simple questionnaire Create simple graph using JIT (LGfL),</p> <p>Branching database (iBoard LGfL, Mini-beasts database LGfL) Discuss data and begin to compare information.</p>
<p>Switched On Online Safety</p>	<p>Unit 2.1 – We are Year 2 rule writers Reviewing and editing our online safety guidelines</p>	<p>Unit 2.2 – We are not online bullies Creating a strong message against online bullying</p>	<p>Unit 2.3 – We are safe searchers Learning how to use search engines safely</p>	<p>Unit 2.4 – We are code masters Generating strong passwords and keeping them safe</p>	<p>Unit 2.5 – We are online behaviour experts Solving online safety problems</p>	<p>Unit 2.6 – We are game raters Understanding and applying the PEGI rating system for games</p>
<p>Barefoot Computing</p>	<p>Spelling Rules Algorithm</p> <p>ScratchJr Tinker</p>	<p>ScratchJr Knock Knock Joke</p>	<p>SEND: Lego Building Algorithms</p> <p>Unplugged: Decomposition</p>	<p>Patterns Unplugged – Elephants, Cats and Cars</p>	<p>Sharing Sweets Algorithm</p>	<p>SEND: River Crossing Activity</p>

<p>Year 3</p>	<p>Housekeeping: Logging onto computers/devices</p> <p>Using LGfL username and password in school and at home</p> <p>Accessing subscription services such as Google Classroom</p>	<p>Programming: Pro-bot Unit (Islington)</p> <p>Code.org Playlab</p> <p>Scratch Islington Y3 Unit 1</p> <p>Networks and Communications Unit (8 lessons)</p> <p>Use micro:bits for physical computing</p>	<p>Multimedia & Word processing Edit images using crop, resize, re-colour G-Suite</p> <p>Create a video presentation using digital photographs iMovie app/ Google apps</p> <p>Create quiz using Kahoot!</p> <p>Combine audio, video and text in Book Creator</p>	<p>Communication & Collaboration Create and share story/work/project (2Publish or Word), Use microphones to record information.</p> <p>Use J2e5 to blog work.</p> <p>Online research for topic using child-friendly search engines.</p>	<p>Digital Media Animation: create complex animation PurpleMash 2Animate, JIT (LGfL</p> <p>Music/Sound: Create voice over and add backing track to video presentation. LGfL Audio Network microphones, GarageBand</p>	<p>Data Design and collect information for a simple questionnaire</p> <p>Collect data and present in a variety of formats, e.g. data loggers JiT</p> <p>Use a simple existing database to carry out a simple search to answer a series of questions. Quizlet/ Google Forms</p>
<p>Switched On Online Safety</p>	<p>Unit 3.1 – We are Year 3 rule writers Reviewing and editing our online safety rules</p>	<p>Unit 3.2 – We are digital friends Developing an awareness of online bullying</p>	<p>Unit 3.3 – We are internet detectives Assessing the trustworthiness of websites</p>	<p>Unit 3.4 – We are aware of our digital footprint Understanding the digital trails we leave behind</p>	<p>Unit 3.5 – We are netiquette experts Practising good netiquette</p>	<p>Unit 3.6 – We are avatar creators Who do we really know online?</p>

Barefoot Computing	<p>Unplugged: Decomposition (Re-visited)</p> <p>2D Shape Drawing Debugging</p>	<p>Logical Reasoning</p> <p>Unplugged: Abstraction</p>	<p>Patterns Unplugged – Reusing recipes</p> <p>Scratch Tinkering/ SEND: Scratch Tinkering</p>	<p>Shapes and Crystal Flowers (Scratch)</p> <p>SEND: Musical Sequences Activity</p>	<p>World Map Logic Activity</p>	<p>Make a Game Project (Scratch)</p>
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Year 4	<p>Housekeeping: Logging onto computers/devices</p> <p>Using LGfL username and password in school and at home</p> <p>Accessing subscription services such as Google Classroom</p>	<p>Programming: PurpleMash 2Code</p> <p>Code.org Playlab</p> <p>Scratch Islington Y4 Unit 1</p> <p>2 code LGfL project</p> <p>Networks and Communications Unit (8 lessons)</p> <p>Use micro:bits for physical computing</p>	<p>Multimedia & Word processing Word Processing: Word, docs & Publisher (using a wide range of tools and integrating other online resources: hyper linking to appropriate websites, embedding content, acknowledging sources.) Touch typing (using 2 hands to type)</p> <p>Using different templates for different genres, e.g. newspaper (LGfL J2Easy J2e5, Publisher), Quiz (Kahoot!)</p>	<p>Communication & Collaboration Online publishing: creating and commenting on each other’s blogs/work (See planning)</p> <p>Online research: use search technologies effectively including search tools, e.g. searching maps/images</p> <p>Complete an online quiz or survey, e.g. LGFL e-safety survey</p>	<p>Digital Media <u>Graphics:</u> Create digital artwork portfolio and interactive webpages for blog (J2e5 on LGfL)</p> <p><u>Video:</u> re-edit video footage to create own presentation - iMovie,</p> <p><u>Music/Sound:</u> Radio Programme project (listen, evaluate, plan and write a script. Rehearse/record voice. Create/add backing track and sound effects.) GarageBand, Audacity, Audio Network</p>	<p>Data Design and collect information for a simple questionnaire</p> <p>Collect data and present in a variety of formats, e.g. , Google Sheets</p> <p>Design and create a database. Use database to carryout complex searches to answer questions.</p> <p>E.g. sort what material is this?</p>
Switched On Online Safety	<p>Unit 4.1 – We are Year 4 rule writers Reviewing and editing our online safety rules.</p>	<p>Unit 4.2 - We are standing up to peer pressure Dealing positively with peer pressure</p>	<p>Unit 4.3 - We are aware that our online content lasts forever Getting the message: pre- and post-internet</p>	<p>Unit 4.4 - We are online risk managers Understanding risk and prevention of information loss</p>	<p>Unit 4.5 - We are respectful of digital rights and responsibilities Understanding and respecting digital rights and responsibilities</p>	<p>Unit 4.6 - We are careful when talking to virtual friends Virtual friendship vs. real friendship; who we can trust</p>

Barefoot Computing	Modelling the Internet	Scratch Pizza Pickle Debug	KS2 Search Engine Rank Results	Animated Poem Decomposition (Scratch)	Logical Number Sequences	Unplugged: Variables
	Selecting Search Results	Bug in the Water Cycle (Scratch)				

<p>Year 5</p>	<p>Housekeeping: Logging onto computers/devices</p> <p>Using LGfL username and password in school and at home</p> <p>Accessing subscription services such as Google Classroom</p>	<p>Programming: PurpleMash 2Code</p> <p>Code.org Playlab</p> <p>Scratch Islington Y5 Unit 1 (Quiz)</p> <p>SOCIT Kodu Unit</p> <p>Use micro:bits for physical computing</p>	<p>Multimedia & Word processing Choose from a range of packages to create presentations. Organise, refine and present information for a specific audience. (LGfL J2E, Publisher, PowerPoint, Word, Scratch Evaluate their own and each other's work through peer assessment (Publish and add comments on blog) Develop confidence using both hands when typing. Create range of genre using Book Creator incorporating multimedia Online quiz generator (e.g. Kahoot!)</p>	<p>Communication & Collaboration Online publishing: creating and commenting on each other's blogs/work (See 'blogging Unit' planning).</p> <p>Visit a variety of school blogs, discuss & compare</p> <p>Online research: use search technologies effectively including copyright</p> <p>Complete an online quiz or survey, e.g. LGFL e-safety survey</p>	<p>Digital Media <u>Graphics:</u> Creating digital artwork and interactive webpages for blog (J2E on LGfL)</p> <p><u>Video & Sound:</u> Film project in groups (plan a video, use different filming techniques and sound effects, present and evaluate work to audience) - iMovie, Audio Network, Garage Band.</p> <p><u>Music/Sound:</u> Radio Program project (listen, evaluate, plan and write a script. Rehearse and record voice. Create and add backing track and sound effects.) Audacity, Audio Network.</p>	<p>Data Spread sheet modelling using Google Sheets</p> <p>Create a budget for a school tuck shop/ planning class party</p> <p>Change the data and formulae in a spread sheet to answer 'what if ...?' questions and check predictions</p>
<p>Switched On Online Safety</p>	<p>Unit 5.1 - We are Year 5 rule writers Reviewing and editing our online safety rules</p>	<p>Unit 5.2 - We are responsible for our online actions Understanding the impact of online behaviour</p>	<p>Unit 5.3 - We are content evaluators Understanding advertising and endorsements online</p>	<p>Unit 5.4 - We are protecting our online reputation Developing strategies to protect our future selves</p>	<p>Unit 5.5 - We are respectful of copyright Understanding and applying copyright laws</p>	<p>Unit 5.6 - We are game changers Understanding how games developers make money</p>

Barefoot Computing	Network Hunt	Investigating Inputs (Scratch)	Maths Quiz – Selection (Scratch)	Kodu Tinker	Maths Quiz – Variables (Scratch)	Classroom Sound Monitor (Scratch)
	Viking Raid Animation (Scratch)	Investigating Outputs	Solar System Simulation (Scratch)	Use selection (Kodu)		

Year 6	<p>Housekeeping: Logging onto computers/device</p> <p>Using LGfL username and password in school and at home</p> <p>Accessing subscription services such as Google Classroom</p>	<p>Programming: PurpleMash 2Code</p> <p>Code.org</p> <p>Introduction to HTML</p> <p>Networks and Communications Unit (8 lessons) Y6/7 Transition unit linking to blog (Islington)</p>	<p>Multimedia & Word processing Create collaborative documents, (Wiki) to organize, present and publish information for different purposes to a range of audiences. (J2E on LGfL, Publisher, PowerPoint, Word)</p> <p>Present and evaluate my own and each other’s work through peer assessment (Publish and add comments on blog)</p> <p>Consolidate keyboard techniques and touch typing skills</p>	<p>Communication & Collaboration Online publishing: creating and commenting on each other’s blogs/work. Visit a variety of school blogs & compare. Regularly update a blog during a term. Add photos and links to related sites or other blogs to make it personal.</p> <p>Online research: use search technologies effectively including copyright</p> <p>Complete an online quiz or survey, e.g. LGfL e-safety survey</p>	<p>Digital Media Graphics: Creating digital artwork and interactive webpages for blog (J2E on LGfL)</p> <p>Video/Animation & Sound: plan a storyboard Create an animation for a purpose. Film, edit and refine. Re-edit, create sound effects and backing track. Publish and present to an audience iMovie, Audio Network, Audacity.</p>	<p>Data Spread sheet Use a spread sheet to solve problems. http://www.realworldmath.org/measurement-lessons.html</p> <p>Spread sheet modelling. Create a budget to accompany a produce. Research the cost of materials, labour, packaging, transport etc. Present to audience in ‘Dragon Den’ style</p>
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Switched On Online Safety	Unit 6.1 - We are online safety ambassadors Reviewing and editing our online safety rules	Unit 6.2 - We will not share inappropriate images Inappropriate use of technology and the internet – nude selfies.	Unit 6.3 - We are safe social networkers Understanding that internet safety skills must always be switched on	Unit 6.4 - We are respectful of others Respecting the personal information and privacy of others	Unit 6.5 - We are online safety problem solvers Using our skills to resolve unfamiliar situations	Unit 6.6 - We are safe gaming experts Creating and delivering advice on safe online gaming
Barefoot Computing	KS2 Search Engine Rank Results Intro to HTML	Intro to HTML with Mozilla Thimble	Designing Games with Kodu Lab/ Scratch/ Code.org Playlab	Designing Games with Kodu Lab/	Create a website using HTML skills learned from first term.	Create a website using HTML skills learned from first term.