

Year 3

Computing and Digital Skills

	Apps:	Web Resources:	LGfL resources:	Digital devices:
Computer Science 	Scratch Jr Kodable Lightbot	Scratch Code for Life Code.org PurpleMash 2Code (subscription) Barefoot BBC Computing/Science Clips	J2Code Virtual Experiments	Makey Makey
Digital Literacy 	Safari Chrome	Switched On Online Safety Thinkuknow (Lee and Kim) BBC KS2 Computing 2Simple 2Email PurpleMash email	US Online CyberPass J2e J2Webby Office 365	Laptops Desktops iPad Tablets
Information Technology 	J2Launch iMovie GarageBand Green Screen by DoInk (subscription) Book Creator Kahoot! Apple Pages/ Numbers	Dance Mat typing (BBC) 2Simple 2Type PurpleMash Brown Bear typing Primary Games Arena Book Creator Microsoft Word/ Excel Google Docs/ Sheets	J2e Weather Stations Busy Things J2Webby	Data Loggers Digital camera iPad Tablets Microphones Sound buttons

National Curriculum (by the end of KS2)

Unplugged:

- ❖ Solve problems by decomposing them into smaller parts
- ❖ Use logical reasoning to explain how some simple algorithms work

Coding/Programming:

- ❖ Detect and correct errors in algorithms and programs
- ❖ Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems
- ❖ Use sequence, selection and repetition in programs
- ❖ Work with variables
- ❖ Work with various forms of input and output

Key Skills/Objectives:

- I can plan and enter a sequence of instructions on a robot/sprite to achieve specific outcomes
- I can test and improve/debug programmed sequences
- I can use loops (repeat/forever) to achieve solutions to tasks
- I can use computational thinking to solve open ended problems
- I can talk about algorithms planned by others and identify any problems and the expected outcome
- I can explain how algorithms work, predicting outcomes and debugging

Supporting Units of Work

Islington:

- ❖ Unit Scratch – Drawing Shapes
- ❖ Makey Makey projects

Additional Documents:

- ❖ Scratch: Progression Yr 3-5

Barefoot:

- ❖ Unplugged: Decomposition (Re-visited)
- ❖ 2D Shape Drawing Debugging
- ❖ Logical Reasoning
- ❖ Unplugged: Abstraction
- ❖ Patterns Unplugged – Reusing recipes
- ❖ Scratch Tinkering/ (SEND) Scratch Tinkering
- ❖ Shapes and Crystal Flowers (Scratch)
- ❖ (SEND) Musical Sequences Activity
- ❖ World Map Logic Activity
- ❖ Make a Game Project (Scratch)

Examples of Cross Curricular Links

- ✓ Create games/simulations linked to topics using Scratch – conversations, stories, fact file
- ✓ Use Scratch to create virtual tours around key locations – school, London, countries
- ✓ Use a Maths function machine to relate Input/ Output and variables
- ✓ Use computer simulations via LGfL Virtual Experiments or BBC Science clips

National Curriculum (by the end of KS2)

- ❖ Use technology safely, respectfully and responsibly
- ❖ Recognise acceptable / unacceptable behaviour
- ❖ Identify a range of ways to report concerns about content and contact
- ❖ Understand how computer networks, including the internet, 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 search results are selected and ranked

Key Skills/Objectives

- I can use an age appropriate search engine independently
- I understand plagiarism when using copy/paste from a webpage
- I know the difference between fact, fiction and opinion online
- I can explore and discuss the benefits of a range of online communication tools
- I know how to respond to unpleasant communications
- I understand the need to keep personal information private and am responsible in my online presence
- I can create and use a basic email service
- I know the difference between personal, private and public online spaces and the risks associated with these
- I understand that there are rules about using public spaces online
- I know that some videogames and online services are not appropriate for my age

Switched On Online Safety:

- Unit 3.1 – We are Year 3 rule writers
- Unit 3.2 – We are digital friends
- Unit 3.3 – We are internet detectives
- Unit 3.4 – We are aware of our digital footprint
- Unit 3.5 – We are netiquette experts
- Unit 3.6 – We are avatar creators



Examples of Cross Curricular Links

- ✓ Create a presentation about a Sports personality and then publish to a blog
- ✓ View and comment on others' work on a blog
- ✓ Write emails to class mates in the style of a historic period or to report a newsworthy event in history (e.g. a Volcanic eruption)

National Curriculum

- ❖ 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

Key Skills/Objectives

- I can create and insert music and sounds into presentations and documents
- I can create and manipulate digital artwork
- I use reasoning about the quality and composition of images
- I can perform basic editing on images/video – crop, recolour, resize
- I can use numerous design features such as text boxes, borders and WordArt in different layouts and styles
- I can use a variety of presentation software to make a sequence of slides
- I can add to, sort and search a database (including branching)
- I can interrogate a simple database to answer questions and create charts from the data
- I can use spreadsheet cell references
- I can format cells and text appropriately
- I can use a data logger to capture measurements over time

Remember to:

- give pupils opportunities to publish their written work digitally
- provide sharing opportunities across the wider community
- share tips with parents/carers

Examples of Cross Curricular Links

- ✓ Use audio tools to add sound effects to their writing and record
- ✓ Edit and illustrate shape poems
- ✓ Combine images/video/audio to create e-books
- ✓ Make an animation of the changing seasons or a growing plant
- ✓ Write and present a newspaper article
- ✓ Create a weather forecast from around the world
- ✓ Create a poster or tourist leaflet connected to other subjects

Examples of Cross Curricular Links

- ✓ Create a topic quiz using a quiz maker (e.g. Kahoot)
- ✓ Create a podcast or radio broadcast linked to a key period in time
- ✓ Create an Estate Agency database for Roman property
- ✓ Use weather station data to compare weather across the UK
- ✓ Use data logger to identify ideal plant growing conditions
- ✓ Create a non-fiction book using a range of audio, visual and text elements