Year 2

Computing and Digital Skills

Islington Computing

	Apps:	Web Resources:	LGfL resources:	Digital devices:
Computer Science </>	Scratch Jr Bee-Bots Daisy the Dinosaur Kodable	Code for Life Code.org PurpleMash 2Code (subscription) Barefoot	J2e PB Bear Busy Things JiT 'Turtle'	Bee-Bot (Blue) Pro-Bot Code-a-pillar Roamer
Digital Literacy @	Safari Chrome	Switched On Online Safety Thinkuknow (Hectors World) BBC KS1 Computing Spoof webpage Safe Web Search	US Online	Laptops Desktops iPad Tablets
Information Technology	Hairy Letters Jolly Phonics Tiny Tap J2Launch iMovie Green Screen by DoInk (subscription) GarageBand Book Creator Apple Pages/Numbers	Dance Mat typing (BBC) 2Simple 2Type PurpleMash Brown Bear typing Primary Games Arena Book Creator Microsoft Word/Excel Google Docs/Sheets	JiT Write, Chart. Animation Picture Book Maker Busy Things J2Webby	Digital camera iPad Tablets Microphones Sound buttons

Islington Computing

</> Computer Science

National Curriculum

Unplugged:

- Understand what algorithms are
- Understand that algorithms are implemented as programs on digital devices

Coding/Programming

- Understand that programs execute by following precise and unambiguous instructions
- Create simple programs
- Debug simple programs
- Use logical reasoning to predict the behaviour of own programs

Key Skills/Objectives

- I can physically follow instructions including turns (right angle)
- I can create an algorithm for a specific purpose
- I am able to sequence and programme a digital device specifying distance and turns, and drawing a trail
- I can predict what will happen and test results
- I can use software to create movement and patterns on a screen
- I am able to talk about similarities and differences between physical devices and onscreen robots
- I can use the word debug to correct any mistakes and explain what I have done
- I can experience a range of control devices such as a microscope, sound recorders, cameras and other devices

Islington Computing

Supporting Units of Work

Islington:

Unit 1- Pro-bots Unit
Unit 2 – Onscreen Turtles

Barefoot:

- Spelling Rules Algorithm
- ScratchJr Tinker
- ScratchJr Knock Knock Joke
- Lego Building Algorithms (SEND)
- Unplugged: Decomposition
- Patterns Unplugged – Elephants, Cats and Cars
- Sharing Sweets Algorithm
- River Crossing Activity (SEND)

Examples of Cross Curricular Links

- Create a set of online instructions to meet a challenge e.g. a shape or right angle
- Maths – Create different simple shapes/patterns using a program
- Topic – Class to guide a ProBot/Fakebot from one place of an island to another. Debug route until challenge is met
- Maths – ½ and ¼ turns, position, direction and movement, use the robots to make shapes (square, rectangle, octagon), repeating patterns
- PE – create dance sequences and then algorithms for others to follow
- English – use digital device to visit characters/ pictures from a story in order
- Use apps such as Bee-Bot and Kodable to test and reinforce knowledge
- Use Scratch Jr to create a story using scenes

Islington Computing

@ Digital Literacy

National Curriculum

- 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

Key Skills/Objectives

- I can use a search engine to find information using agreed key words
- I can navigate to a website by entering a simple web address
- I know about the risks of advertising or pop-up windows
- I understand that some information online may be untrue
- I can keep my password secret
- I can contribute to online class blogs
- I understand the need to be respectful online
- I know that I need to check information before uploading

Islington Computing

Switched On Online Safety:

Unit 2.1 – We are Year 2 rule writers
Unit 2.2 – We are not online bullies
Unit 2.3 – We are safe searchers
Unit 2.4 – We are code masters
Unit 2.5 – We are online behaviour experts
Unit 2.6 – We are game raters

SWITCHED ON
Online Safety

Examples of Cross Curricular Links

- ✓ Research an author and record answers to specific questions
- ✓ Visit spoof websites (http://webfronter.com/rbkc/tomatospider/) and design own fake pages on paper
- ✓ Begin to comment on peers work

Islington Computing

Information Technology

National Curriculum

- Use technology purposefully to create, organise, store, manipulate and retrieve digital content
- Recognise common uses of information technology beyond school

Key Skills/Objectives

- I can create audio using digital instruments and recordings
- I can create/edit an image using a range of 'tools' both on and offline including 'undo' and 'redo'
- I can word process short pieces of text including the use of formatting tools
- I am beginning to explain reasons why I have made choices to a teacher or talk partner
- I can save, print, retrieve and edit my work
- I can find my work to open or print it
- I can use and add to a branching database to find objects using Yes/No questions
- I can add information to a table and use this to create graphs/bar charts
- I can use a data logger and sensors with support

Remember to:

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

Islington Computing

Examples of Cross Curricular Links

- ✓ Add sound effects to a poem and record
- ✓ Use a recording device to reflect on own/peers work
- ✓ Combine images/video/audio to create e-books
- ✓ Use paint packages to create or replicate a specific artistic style
- ✓ Create a biography of a famous person (e.g. Samuel Pepys)

Examples of Cross Curricular Links

- ✓ Label pictures/diagrams for a science experiment
- ✓ Create an online presentation
- ✓ Collect data (e.g. favourite snacks) and create charts and graphs using JiT and then blog results
- ✓ Collect data for the temperature of melting ice and describe changes