Computing Curriculum Activity Map

Refer to "Progression of Activities" documents for greater detail. Embed all activities in curriculum areas / topics. (Software is mainly LGfL or free)

<table>
<tr><th>Year 1</th><th>Year 2</th><th>Year 3</th><th>Year 4</th><th>Year 5</th><th>Year 6</th></tr>
<tr><td colspan="2">Programming:
BeeBots on mats
Specific tasks
Recording of algorithms
Predicting from an algorithm
On-screen activities</td><td>Programming:
Same as Y1 but more complicated algorithms.
Intro REPEAT / LOOP

(J2Code – JIT / 2Go)</td><td>Programming:
Drawing shapes with Probot and / OR LOGO
REPEAT / LOOP
Intro script blocks

(J2Code)</td><td>Programming:
Complex LOGO shapes on screen.
Sub-programs

(J2Code – Visual & LOGO)</td><td colspan="2">Programming:
Complex games
Use variables (score / timer / lives)
Use conditions: "if – then"

(J2Code / Scratch / KODU / App-Inventor)</td></tr>
<tr><td colspan="6">Other programming options include:
Espresso Coding / 2Simple Purple Mash contains 2Code / LEGO Mindstorms & LEGO WeDo / Flowol4 with mimics</td></tr>
<tr><td colspan="6">Recognising uses of technology / Digital Research / Understanding networks including the Internet</td></tr>
<tr><td colspan="2">Use of "safe" search sites
Structure of school network
Distinguish fact / opinion
Recognise uses of technology in everyday life</td><td colspan="2">Develop search techniques: key word / phrase
Understand & use bookmarks / favourites etc
Understand some information is wrong / inaccurate / biased / filtered out & blocked.</td><td colspan="2">Understand, evaluate & choose search sites.
Understand domain types & concepts of plagiarism / copyright / creative commons etc.
Understand HOW computers handle various data.</td></tr>
<tr><td colspan="2">Data Logging (Science):
Observing readings that respond to temp / light change.

Explore various environments for temp / light range
(LogIT Explorer / LogBox)</td><td colspan="2">Data Logging (Science):
Science test: which colour fabric for night workers?

(LogIT Explorer / LogBox)</td><td>Data Logging (Science):
Science test: find best material to insulate / muffle sound?

(LogIT Explorer / LogBox)</td><td>Data Logging (Science):
Science test: Predict ice in water temp graph

(LogIT Explorer / LogBox)</td><td>Data Logging (Science):
Science test: find best material to insulate heat?
Real monitoring systems:
• Weather
• River levels</td></tr>
<tr><td colspan="2"></td><td colspan="3">Data: Spreadsheets:
Understanding cell references (Wizards Challenge)
Understanding spreadsheets perform calculations
(Number Cruncher)</td><td>Data: Spreadsheets:
Progression of number modelling: sponsored events / junk model costs / planning a party / Electrical Appliances / Score trackers</td></tr>
<tr><td>Data handling (Maths):
Pictograms
(JIT / 2Count)</td><td>Data handling (Maths):
Block graphs / bar charts
(JIT / 2Graph)</td><td>Data handling (Maths):
Branching database: classifying & distinguishing between items (Branch)</td><td>Data handling (Maths):
Use a database to search for information , produce graphs / venn diagrams etc</td><td colspan="2">Data handling (Maths):
Use a databases to search for information , using AND / OR & more complicated criteria.
(2Investigate)</td></tr>
<tr><td colspan="2">Publish on school blogsite</td><td colspan="4">Use of J2Vote to create online votes / quizzes / surveys to produce a variety of graphs</td></tr>
</table>

Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multimedia					
Photos / Animation / Presentation		**Photo Slideshow**	**Stop Frame Animation**	**Video Editing**	
Taking photos / discussing photos	Modify / crop photos Combine with text & sounds (2Create Animation - JIT) Publish to blog site	Slideshow with recorded voice narration (PhotoStory3 / MovieMaker)	Flick-books Stop-frame animation (J2Spotlight) Publish to blog site	Filming & editing video Adding voice narration / sound effects / music track (MovieMaker) Teacher upload to LGfL VideoCentral Embed on J2e page for blog site	
Graphics: Explore paint tools. Develop skills with variety of specific tools: brush / fill can / spray / shapes etc (JIT / 2Paint etc JIT Animate)		**Graphics:** Combine own graphics in other multimedia presentations	**Graphics:** Modify images. Combine with other media in J2e5. See above. Create & use graphic banners . Understand different graphic format. (MS WordArt / www.cooltext .com) Use Computer Aided Design software to design a living space: bedroom / kitchen / playground / park etc (Spex / Google SketchUp)		
Sound & Music: Recording voice Talking tins / books photo albums etc.	**Sound & Music:** Creating simple music sequences using (2Simple 2Sequence)	**Sound & Music:** Download sound samples use in presentations to combine with other text / images. (PhotoStory3 / Powerpoint / J2e5)		**Sound & Music:** Editing recorded sound (Audacity) Combine with multimedia (J2e5 & blog) (O-Generator O-Music sequencing)	
		Sound files recorded in school can be uploaded to LGfL Podcast central to be accessed by the wider school community			
Communication: Messaging with safe & restricted communication tools. (Learning platform / LondonMail - safemail)		**Communication:** Internal use of email within class / year group / school Use of email with an external partner school . Blogging J2e5 (LondonMail - safemail)		**Communication:** Pupil controlled web / blog site. Responsible pupils ONLY. Pupils' Council ? (J2Bloggy)	
If children are publishing a variety of work on the school blogsite, children must be coached in providing clear, unambiguous, constructive, positive comments giving specific feedback on other's work. This can start within the class, and extend to other classes / partner school(s), and worldwide. (J2e)					
e-safety: Hector's World DigiDuck's Big Decision Smartie the Penguin	**e-safety:** Lee & Kim	**e-safety:** Dongle	**e-safety:** Capt Kara & Winston's SMART Adventures	**e-safety:** Cyber Cafe	**e-safety:** Us Online Becky
Continuous reinforcement of e-Safety messages in PSHE / SRE and using communication tools: email, messaging, blog comments etc Giving away pieces of personal information / safe passwords / writing clearly & with sensitivity					