

SE3BM Pathways - Computing Scheme of Work Overview

Strands	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Computer Science</p> <p>Focus: Programming</p> <p>12 weeks</p> <p><i>Refer to the progressions document to see recommended order units are taught in.</i></p>	<p>Giving instructions...Making toast (2 lessons - Programming devices) Unplugged</p> <p>Journeys - Beebot Garden Walk (4 lessons - Program a route) Floor robots</p> <p>What is an algorithm? (5 lessons - Using instructions) Busy Things</p> <p>I can code! (2/4 lessons - Programming on-screen) JIT, Tynker</p>	<p>How does that work? (4 lessons - Everyday devices) Unplugged</p> <p>Demolition robot (5 lessons – Algorithms, Program a robot)</p> <p>Floor robot, JIT, Busy Things Exploring block coding with Scratch Jr (4 lessons - Programming on screen using blocks) Scratch Jr – tablet or PC based</p> <p>I can debug! (5 lessons - Programming on screen using simple commands) JIT</p>	<p>Exploring how things work <i>(WAS How does that work?)</i> (2 lessons - Writing instructions for a game.) Unplugged, j2data</p> <p>Can your robot make shapes? (3 lessons - Algorithms) floor robots, Scratch</p> <p>I can use block coding (5 lessons - Program simple sequences) Scratch Jr, Scratch versions</p>	<p>Dancing with Scratch (4 lessons - Programming events using selection) Scratch</p> <p>Logo Turtle Mania (6 lessons - Creating on-screen shapes using text based programing) J2code</p> <p>Searching the web (2 lessons - Understanding search engine) Barefoot resources</p>	<p>Game creation with Scratch (4 lessons - on-screen programming) Scratch</p> <p>Logo Shapes and patterns (5 lessons - Procedures & variables) J2code</p> <p>What is the Internet? (2 lessons-Explaining Internet & WWW) BBC bitesize, Barefoot computing</p>	<p>Fun with Scratch (4 lessons - Solving problems) Scratch</p> <p>What's Wrong here? (3 lessons - Syntax & logic errors) BBC bitesize, Scratch</p> <p>Logo Block of flats (4 lessons - Procedures, variables & ifelse) J2code</p>
<p>IT</p> <p>Focus: Text/ Animation/ Music</p> <p>Graphics</p> <p>Data Handling</p> <p>18 Weeks</p> <p><i>Refer to the progressions document to see recommended order units are taught in.</i></p>	<p>Aliens in Space (5 lessons - make an animation) JIT</p> <p>Design a face (2 lessons - creating an avatar and poster) Online software, JIT</p> <p>Design a plate (2/3 lessons - creating an image) Busy Things, JIT, 2Paint a Picture, Paint package</p> <p>Cyberwalk (3 lessons - Creating a digital image) JIT, Painting & drawing software, Busy Things</p> <p>Who painted this? (2 lessons - Creating self-portraits, crediting work) Busy Things</p> <p>I can sort objects (4 lessons - Creating graphs & sorting) JIT</p>	<p>Do you like my Blog? (2 lessons - Create content & comment on others' work) JIT, j2Webby (school blog resource)</p> <p>How does that grow? (5 Lessons – make an animation) JIT</p> <p>Say no to graffiti! (3 lessons - Edit a photo & create a poster) J2e5, 2Paint a Picture, word processing software, Publisher</p> <p>How do you get to school safely? (3 lessons - Create graphs & answer questions) JIT, J2vote</p> <p>Minibeasties (4 lessons - Sorting, classifying & asking questions) J2branch</p>	<p>Do you like my presentation about Ada Lovelace (3 lesson - present information) J2e5, G Suite. PowerPoint, etc...</p> <p>Would you like to read this... (3 lessons - book review) J2e5, QRcodes</p> <p>See & hear my mix (3 lessons - Making a stills-based video) Windows Photos/ iMovie / etc..</p> <p>I can make an animation (5 lessons - Create an animation using web tools) Animation software options</p> <p>Creating a tessellation (2 lessons - Create repeated patterns with tessellations) NEN gallery, Paint/2Paint a picture</p> <p>Finding out about me (5 lessons - Creating a database and investigating it) J2data, 2Investigate</p>	<p>Internet search for a presentation (4 lessons - Finding information about Tim Burners Lee & presenting to an audience) J2e5, Google slides, j2Office, j2Webby image and encyclopedia websites</p> <p>I can rap! (5 lessons - Writing & recording a rap) Audacity, BBC Sounds Effects</p> <p>Design an alien landscape (3 lessons - Editing photos) Pixlr</p> <p>Weather Data (3 lessons - Collecting & analysing information) 2Investigate, j2data, MS Excel®</p> <p>What's a spreadsheet? (3 lessons - Introduction to spreadsheets) MS Excel®/Google Sheet</p>	<p>Design a poster about Charles Babbage (3 lesson - create a poster) Publishing software - j2e5, Google Slides,PowerPoint etc...</p> <p>Can you finish my story? (2 lessons - Blog a story for others to finish) J2e5, j2Webby (school blog software)</p> <p>I can make a stop frame animation! (5 lessons - Create a stop frame animation) Various software options</p> <p>Let's design in 3D! (4 lessons - Design a sculpture/dream house) SketchUp Make</p> <p>Simply Delicious (5 lessons - Using formulae to model costs of a meal) MS Excel®/Google Sheets</p>	<p>My exciting world landmarks (4 lessons - Finding information online) J2e5, 2Publish+ Presentation software, NEN gallery, Child friendly search engines, BBC bitesize, Virtual field trip online resource</p> <p>Do you agree? (3 lessons - Create & share a presentation to persuade) J2e5, j2Webby (school blog software)</p> <p>Code Cracking (6 lessons - make fact files and create video) Windows Photos/ iMovie / etc..</p> <p>Let's design & combine in 3D (3 lessons - Product design - a sweet treat) SketchUp Make</p> <p>Party time! (4 lessons - Plan & cost a party) MS Excel®/Google Sheets</p>
<p>Digital Literacy</p> <p>Focus: Online safety</p> <p>Sharing information</p> <p>Networks</p> <p>6 weeks</p> <p><i>Refer to the progressions document to see recommended order units are taught in.</i></p>	<p>Smartie the Penguin (2 lessons - Know to ask for help) Childnet resource</p> <p>Can I share this picture (1 lesson - Know what to do?) Video and Unplugged</p> <p>Just say no (1 lesson - make a poster) Video and Unplugged</p> <p>How does my garden grow? (2 lessons - Find information online) BBC bitesize</p> <p>Sharing my iceberg work. (2 lessons - sharing work online) JIT, j2Webby (or school blog software)</p>	<p>Digi-ducks Dilemma (2 lessons - Making mistakes online) JIT or 2Publish+, presentation software</p> <p>Follow that footprint (1 lesson - Know we leave a 'digital trail' when on the internet) Unplugged</p> <p>Finding out about... (2 lessons - Finding information online) Any child friendly search engines</p> <p>Let's send a message (2 lessons - Send & respond to emails or messages) Unplugged</p>	<p>Safe surfing with Dongle (4 lessons - SMART rules & personal information) BBC video, J2e5, (LGfL Cyberpass, Google Interland activity)</p> <p>Would I lie to you? (2 lessons - Checking facts) Encyclopedia websites, & BBC bitesize</p> <p>Journey of an email (2 lessons - Networks explained using email) Pupil email or 2Email</p>	<p>Play Like Share (3 lessons - How to share things safely online) Videos and worksheet</p> <p>Here's my presentation (4 lessons - Finding information & images & presenting to an audience) J2e5, J2Office, Google slides, j2Webby</p> <p>Let's Email (2 lessons - How email 'works' - use email to send a story) Pupilmail</p>	<p>Design a poster (3 lessons - Design an e-safety poster) Presentation software - j2e5, Google Slides,PowerPoint etc... Thinkuknow, Kidsmart.</p> <p>Stop! Check! (3 lessons - website validation) Hoax sites, Presentation software - j2e5, Google Slides,PowerPoint etc...</p>	<p>Are you a Cyber Superhero? (3 lessons - Making good online decisions) Unplugged (Option to use Comic Maker website)</p> <p>How fake is that? (3 lessons - Online media & its impacts on body image) Unplugged (Option to use presentation software)</p> <p>How can we trust the internet? (3 lessons - Understand how to check validity) Various online websites</p>