

we are  
**3BM**  
EDUCATION

This is the 3BM computing curriculum pathways document.

It shows a possible route through our computing scheme of work for KS1 & KS2.

This pathway ensures progression and coverage of the national curriculum for computing.

# 3BM Pathways - Computing Scheme of Work Overview

Strands	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
					R1	R2	R1	R2	R1	R2	R1	R2
<p><b>Computer Science</b></p> <p>Units arranged in order of progression</p> <p><b>Focus:</b> Programming</p> <p><b>Networks</b></p> <p><b>Route 1</b> Computer Science choices</p> <p><b>Route 2</b> Computer Science choices</p>	<p><b>Giving Instructions - Making toast</b> (1 lesson - Programming devices) <b>Unplugged</b></p> <p><b>Journeys - Beebot Garden Walk</b> (4 lessons - Program a route) <b>Floor robots, iboard</b></p> <p><b>I'm a problem solver (3 lessons - Using instructions)</b> <b>iboard, Busy Things</b></p> <p><b>I can code!</b> (4 lessons - Programming on-screen) <b>JIT, Tynker</b></p>	<p><b>How does that work?</b> (4 lessons - Everyday devices) <b>Unplugged</b></p> <p><b>Demolition robot</b> (4/5 lessons - Algorithms) <b>Floor robot, JIT, Busy Things</b></p> <p><b>I can debug!</b> (5 lessons - Programming on screen using simple commands) <b>JIT</b></p>	<p><b>Can your robot make shapes?</b> (4 lessons - Algorithms) <b>iboard, floor robots</b></p> <p><b>I can use block coding</b> (5 lessons - Program simple sequences) <b>J2code</b></p> <p><b>Journey of an email</b> (2 lessons - Networks explained using email) <b>Pupil email or 2Email</b></p> <p><b>Words words words</b> (1 lesson - terminology)</p>	<p><b>I can use block coding</b> (5 lessons - Program simple sequences) <b>J2code</b></p> <p><b>Creating a Kodu</b> (5/6 lessons - 3D game creation) <b>Kodu</b></p> <p><b>Journey of an email</b> (2 lessons - Networks explained using email) <b>Pupil email or 2Email</b></p> <p><b>How does that work?</b> (2 lessons - Everyday devices)</p> <p><b>Words words words</b> (1 lesson - terminology)</p>	<p><b>I can make a game using j2code</b> (5/6 lessons - Program a simple game) <b>J2code</b></p> <p><b>Dancing with Scratch</b> (4 lessons - Programming events using selection) <b>Scratch</b></p> <p><b>Let's Email</b> (2 lessons - How email 'works' - use email to send a story) <b>Pupil email</b></p> <p><b>Apple Hunt</b> (2 lessons - programming a 3D game) <b>Kodu</b></p>	<p><b>Logo Turtle Mania</b> (6 lessons - Creating on-screen shapes using text based programming) <b>J2code</b></p> <p><b>Apple Hunt &amp; Create a Kodu game</b> (6 lessons - programming a 3D game) <b>Kodu</b></p> <p><b>Searching the web</b> (2 lessons - Understanding search engine) <b>Barefoot resources</b></p>	<p><b>Starting with Scratch</b> (4 lessons - on-screen programming) <b>Scratch</b></p> <p><b>Robot Rampage!</b> (5 lessons - Programming mBots) <b>mBot robots / Makeblock software</b></p> <p><b>OR</b></p> <p><b>CodeBug</b> (4 lessons - Programming a micro-controller board) <b>CodeBug hardware &amp; software</b></p> <p><b>What is the Internet?</b> (2 lessons-Explaining Internet &amp; WWW) <b>BBC bitesize, Barefoot computing</b></p>	<p><b>Starting with Scratch</b> (4 lessons - on-screen programming) <b>Scratch</b></p> <p><b>Logo block of flats</b> (5 lessons - Procedures &amp; variables) <b>J2code</b></p> <p><b>My sustainable house</b> (2 lessons - strategy simulation) <b>Website / Spreadsheet</b></p> <p><b>What is the Internet?</b> (2 lessons-Explaining Internet &amp; WWW) <b>BBC bitesize, Barefoot computing</b></p>	<p><b>Have fun with Scratch</b> (4 lessons - Solving problems) <b>Scratch</b></p> <p><b>Robot Rampage!</b> (5 lessons - Program mBots) <b>mBot robots / Makeblock software</b></p> <p><b>OR</b></p> <p><b>CodeBug</b> (4 lessons - Programming a micro-controller board) <b>CodeBug hardware &amp; software</b></p> <p><b>What's Wrong here?</b> (3 lessons - Syntax &amp; logic errors) <b>BBC bitesize, Scratch</b></p> <p><b>Searching Searching</b> (2/3 lessons - How a search engine 'works') <b>BBC bitesize, CookIT from NEN, Barefoot resources, search engines</b></p>	<p><b>Have fun with Scratch</b> (4 lessons - Solving problems) <b>Scratch</b></p> <p><b>Logo patterns</b> (2 lessons - Procedures, variables &amp; ifelse) <b>J2code</b></p> <p><b>What's Wrong here?</b> (3 lessons - Syntax &amp; logic errors) <b>BBC bitesize, Scratch</b></p>		
<p><b>IT</b></p> <p><b>Focus:</b> Text/ Animation/ Music</p> <p><b>Graphics</b></p> <p><b>Data Handling</b></p>	<p><b>Robot Words</b> (2/3 lessons - Create a story with a word bank) <b>Busy Things, JIT</b></p> <p><b>Design a plate</b> (3 lessons - creating an image) <b>Busy Things, JIT, Painting Drawing software</b></p> <p><b>Cyberwalk</b> (3 lessons - Creating a digital image) <b>JIT, Painting &amp; drawing software, Busy Things</b></p> <p><b>Who painted this?</b> (2 lessons - Creating self-portraits, crediting work) <b>Busy Things</b></p> <p><b>I can sort objects</b> (4 lessons - Creating graphs &amp; sorting) <b>iboard, JIT</b></p>	<p><b>Do you like my Blog?</b> (2 lessons - Create content &amp; comment on others' work) <b>JIT, j2Webby (school blog resource)</b></p> <p><b>Say no to graffiti!</b> (3 lessons - Edit a photo &amp; create a poster) <b>J2e5, 2Paint a Picture, word processing software, Publisher</b></p> <p><b>Mini-beasties</b> (4 lessons - Sorting, classifying &amp; asking questions) <b>J2branch, iboard</b></p> <p><b>Getting to school safely</b> (2/3 lessons - Create graphs &amp; answer questions) <b>JIT, J2vote</b></p> <p><b>Finding out about us</b> (3 lessons - Creating a class database &amp; investigating it) <b>J2 Data, 2Investigate</b></p>	<p><b>See &amp; hear my mix</b> (3 lessons - Making a stills-based video) <b>Windows Moviemaker</b></p> <p><b>Do you like my presentation?</b> (4 lessons - Develop &amp; share a presentation) <b>J2e5, j2webby (school blog resource)</b></p> <p><b>I can make an animation</b> (5 lessons - Create an animation using web tools) <b>Animation software options</b></p> <p><b>Finding out about healthy habits</b> (3 lessons - Databases) <b>J2data, 2Investigate</b></p> <p><b>Creating a tessellation</b> (2/3 lessons - Create repeated patterns with tessellations) <b>NEN gallery, Paint/2Paint a picture</b></p>	<p><b>My exciting world landmarks</b> (3/4 lessons - Finding information online) <b>J2e5, 2Publish+ Presentation software, NEN gallery, Child friendly search engines, BBC bitesize</b></p> <p><b>I can rap!</b> (5 lessons - Writing &amp; recording a rap) <b>Audio network, Audacity, school podcast channel</b></p> <p><b>Design an alien landscape</b> (3 lessons - Editing photos) <b>Pixlr</b></p> <p><b>Weather Data</b> (3/4 lessons - Collecting &amp; analysing information) <b>2Investigate, j2data, MS Excel®</b></p> <p><b>What's a spreadsheet?</b> (3 lessons - Introduction to spreadsheets) <b>MS Excel®</b></p>	<p><b>Can you finish my story?</b> (2 lessons - Blog a story for others to finish) <b>J2e5, j2Webby (school blog software)</b></p> <p><b>I can make an animation!</b> (5 lessons - Create a stop frame animation) <b>Animation software options</b></p> <p><b>Let's design in 3D!</b> (3/4 lessons - Design a sculpture/ dream house) <b>SketchUp Make</b></p> <p><b>Simply Delicious</b> (5 lessons - Using formulae to model costs of a meal) <b>MS Excel®</b></p>	<p><b>Do you agree?</b> (3 lessons - Create &amp; share a presentation to persuade) <b>J2e5, j2Webby (school blog software)</b></p> <p><b>Let's design &amp; combine in 3D</b> (3/4 lessons - Product design - a sweet treat) <b>SketchUp Make</b></p> <p><b>Party time!</b> (4 lessons - Plan &amp; cost a party) <b>MS Excel®</b></p>						
<p><b>Digital Literacy</b></p> <p><b>Online safety</b></p> <p><b>Sharing information</b></p>	<p><b>Digi-ducks Dilemma</b> (2 lessons - Making mistakes online) <b>JIT or 2Publish+, presentation software</b></p> <p><b>Smartie the Penguin</b> (2 lessons - Know to ask for help) <b>Childnet resource</b></p> <p><b>How does my garden grow?</b> (1 lesson - Find information online) <b>BBC bitesize</b></p> <p><b>Sharing my iceberg work.</b> (2 lessons - sharing work online) <b>JIT, j2Webby (or school blog software)</b></p>	<p><b>Digi-ducks Dilemma</b> (2 lessons - Making mistakes online) <b>JIT or 2Publish+, presentation software</b></p> <p><b>Follow that footprint</b> (1 lesson - Know we leave a 'digital trail' when on the internet) <b>Unplugged</b></p> <p><b>Finding out about...</b> (2 lessons - Finding information online) <b>Any child friendly search engines</b></p> <p><b>Let's email grandma</b> (if have 2email) <b>OR Let's send a message</b> (2 lessons - Send &amp; respond to emails or messages) <b>2email OR unplugged</b></p>	<p><b>Would I lie to you?</b> (2 lessons - Checking facts) <b>Encyclopaedia websites, &amp; BBC bitesize</b></p> <p><b>Safe surfing with Dongle</b> (2/4 lessons - SMART rules &amp; personal information) <b>BBC video, J2e5, (LGfL Cyberpass)</b></p> <p><b>Internet scenario cards</b> (1 lesson / scenario ) <b>Unplugged</b></p>	<p><b>Let's Email</b> (2 lessons - How email 'works' - use email to send a story) <b>Pupil email</b></p> <p><b>Internet search &amp; presentation</b> (4-7 lessons - Finding information &amp; images &amp; presenting to an audience) <b>J2e5, j2Webby (school blog software) NEN gallery, Encyclopaedia websites</b></p> <p><b>Internet scenario cards</b> (1 lesson / scenario ) <b>Unplugged</b></p>	<p><b>Design a poster</b> (3 lessons - Design an e safety poster) <b>J2e5, presentation software, Thinkuknow, Kidsmart.</b></p> <p><b>Stop! Check!</b> (3 lessons - website validation) <b>Cybercafe (Thinkuknow), J2e5 or presentation software</b></p> <p><b>Internet scenario cards</b> (1 lesson / scenario) <b>Unplugged</b></p>	<p><b>Are you a Cyber Superhero?</b> (2/3 lessons - Making good online decisions) <b>Comic Maker, presentation software</b></p> <p><b>How fake is that?</b> (2/3 lessons - Online media &amp; its impacts on body image) <b>Unplugged (PowerPoint® / optional presentation software)</b></p> <p><b>How can we trust the internet?</b> (3-5 lessons - Understand how to check validity) <b>Various identified websites Presentation software(optional) blogging software (optional)</b></p> <p><b>Internet scenario cards</b> (1 lesson / scenario) <b>Unplugged</b></p>						

*This is an example route through our SoW providing clear progression to cover the Computing National Curriculum. There are more / alternative units for schools with other software.*



**we support you achieve**

The 3BM computing team is very experienced.  
We pride ourselves on being supportive, approachable, and committed  
to providing excellence.

Our service is aimed at being as flexible as possible.  
Key to our support is the quality of our advisors/consultants.

Support will be bespoke to your school's needs.

You can follow us through our Twitter feed: [@3bm\\_edu](#)

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