



Computing Skills Progression

Year R	Software Focus	Software Focus	Software Focus	Software Focus
	<p>Bee-Bots</p> <ul style="list-style-type: none"> - Programme the Bee-bot to move forward, backwards, turn left and turn right - Begin to understand basic sequencing 	<p>FlipGrid</p> <ul style="list-style-type: none"> - Record short videos - Use filters to change the look of a video recording - Play a video recorded in Flipgrid 	<p>Teams</p> <ul style="list-style-type: none"> - Log in using username and password - Understand basic Teams terminology (Tab, Channel) - Find and access your class Team 	<p>VR Headsets</p> <ul style="list-style-type: none"> - Begin to understand the differences between virtual reality and the real world - Use VR to immerse yourself into your learning
	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas
	<ul style="list-style-type: none"> • Programme the bee-bot to move to the phonics sound • Programme the bee-bot to move to numbers 1 – 10 • Sequence numbers using the bee-bot • Story sequencing – programme the bee-bot to move around the board to show the different points of a story 	<ul style="list-style-type: none"> • Use filters and images to create visually exciting video clips • All about me • Describe a dinosaur • Facts about space • Retell a story 	<ul style="list-style-type: none"> • Learn to log on to Teams using your e-mail address and password • Access websites safely following links and clicking on Tabs 	<ul style="list-style-type: none"> • Travel through space • Dinosaur adventure • Animal safari



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	<ul style="list-style-type: none">• create and debug simple programs• understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions• use logical reasoning to predict the behaviour of simple programs	<ul style="list-style-type: none">• use technology purposefully to create, organise, store, manipulate and retrieve digital content• recognise common uses of information technology beyond school• 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	<ul style="list-style-type: none">• use logical reasoning to predict the behaviour of simple programs• recognise common uses of information technology beyond school	<ul style="list-style-type: none">• use logical reasoning to predict the behaviour of simple programs	<ul style="list-style-type: none">• use technology purposefully to create, organise, store, manipulate and retrieve digital content• recognise common uses of information technology beyond school• 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	<ul style="list-style-type: none">• use logical reasoning to predict the behaviour of simple programs• 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
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Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas
<ul style="list-style-type: none"> • Story sequencing (The Gruffalo, The Rainbow Fish etc) • Maths – Can you show me the number... • Pick up a calculation, move the beebot to the answer • Find the phonics sound 	<ul style="list-style-type: none"> • Become familiar with Teams terminology (tab, channel) • Use Teams to access website links safely • Access Forms quizzes 	<ul style="list-style-type: none"> • QR code hunt – Scan the QR code and answer the questions • Create QR codes to show examples of written work and stick to Gruffalo small worlds 	<ul style="list-style-type: none"> • Make a Rainbow fish/sea creature • Design a toy • Create a beach scene • Make a scene from Marlow • Recreate Andy Warhol's art 	<ul style="list-style-type: none"> • Retell stories as part of T4W units • Practise counting in 2s, 5s and 10s • Poetry reading • Showcase written work using photos of work 	<ul style="list-style-type: none"> • Build story setting for The Gruffalo • Build home for Gruffalo character • Build towers showing different amounts to 20



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2	<p>Paint 3D</p> <ul style="list-style-type: none"> -Use the brush tool to create different textures in a picture - Add 2D and 3D text to the canvas -Change text colour, size and font so that it is suitable for the picture 	<p>MS Teams</p> <ul style="list-style-type: none"> -Be able to log in to MS Teams independently -Understand what a channel and a Tab is - Be able to access the files Tab and open resources to use in lesson 	<p>Flipgrid</p> <ul style="list-style-type: none"> -Be able to make changes to a video once recorded -Begin to use the green screen feature to create impactful video clips in different settings - Comment on other children’s videos using a video comment 	<p>Cue Robot</p> <p>Getting started with CUE Portal (makewonder.com)</p>	<p>Sway</p> <ul style="list-style-type: none"> -Create a presentation that includes text and suitable images. -be able to change the layout of a presentation so that it is visually appealing 	<p>Minecraft</p> <ul style="list-style-type: none"> -Open inventory and select blocks -place blocks in a flat green world - place blocks on top of other blocks to create towers -Move around the Minecraft world using forwards and backwards and the mouse for direction -begin to build internal details (rooms in a building, doorways etc)
	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link
	<ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and 	<ul style="list-style-type: none"> • recognise common uses of information technology beyond school 	<ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and 	<ul style="list-style-type: none"> • understand what algorithms are, how they are implemented as programs on digital devices, 	<ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and 	<ul style="list-style-type: none"> • use technology purposefully to create, organise, store, manipulate and



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	<p>retrieve digital content</p> <ul style="list-style-type: none"> recognise common uses of information technology beyond school 	<ul style="list-style-type: none"> 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 	<p>retrieve digital content</p> <ul style="list-style-type: none"> 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 	<p>and that programs execute by following precise and unambiguous instructions</p> <ul style="list-style-type: none"> create and debug simple programs use logical reasoning to predict the behaviour of simple programs 	<p>retrieve digital content</p> <ul style="list-style-type: none"> recognise common uses of information technology beyond school 	<p>retrieve digital content</p> <ul style="list-style-type: none"> 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
	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas
	<ul style="list-style-type: none"> Add flames to a picture of London Create your setting in 3D paint 	<ul style="list-style-type: none"> Teams scavenger hunt – put resources in files, create an assignment, write messages on the posts tab in various channels. Give the children a list of things to find in 	<ul style="list-style-type: none"> Perform poetry Show explain your mask designs Video diary entry from Samuel Pepys 	<ul style="list-style-type: none"> Design a bridge(s) for Cue to travel over Programme CUE to travel along Marlow roads 	<ul style="list-style-type: none"> Make a biography Cars and their evolution Instructions for a recipe Animals and their habitats 	<ul style="list-style-type: none"> Make a city together in Minecraft then burn it down Materials – design houses on Minecraft using different




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	<ul style="list-style-type: none">• Put animals in their correct habitats• Design an African mask	Teams by following written instructions.			<ul style="list-style-type: none">• The Great Fire of London	<p>materials. Discuss advantages of each</p> <ul style="list-style-type: none">• Recreate Marlow Bridge• Build a castle• Recreate the 3 bears' house
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Year 3	Software Focus	Software Focus	Software Focus	Software Focus	Software Focus	Software Focus
	<p>Minecraft</p> <ul style="list-style-type: none"> - Place blocks to build simple structures and pixel artwork - Place signs with text - Collaborate to build structures in a multiplayer world - Use camera and portfolio to evidence work - Complete a coding course in Minecraft Code.org 	<p>Paint 3D</p> <ul style="list-style-type: none"> - Use brush tools and stickers to customise 3D shapes, models and images from 3D library - Explore how light affects 3D objects and images 	<p>Micro:Bits</p> <ul style="list-style-type: none"> - Use block coding to programme a Micro:Bit to perform simple tasks - Create animations using LEDS - Use and understand Micro:bit sensors (light, heat, direction, movement, sound) 	<p>CUE Robot</p> <p>Portal (makewonder.com)</p> 	<p>Sway</p> <ul style="list-style-type: none"> - Format text using keyboard shortcuts - Add digital media such as photos and videos to a presentation 	<p>Flipgrid (Teams)</p> <ul style="list-style-type: none"> - Record short video clips - View videos created by others - Comment and respond to videos appropriately using text - Comment and respond to videos appropriately using video



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	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link
	<p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>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</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>

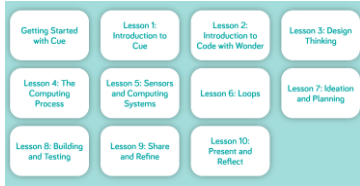


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Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas
<ul style="list-style-type: none"> English - Build story settings, create story journey, use signs to write story Maths – Build arrays to show multiplication, collect data and build a bar chart Geography – create and label the layers of the earth, build a volcano, build a landmark (Taj Mahal, colosseum) History – Build a Stone Age settlement using Stone Age materials Art – Create a self portrait 	<ul style="list-style-type: none"> Design an outfit for a story character Recreate a famous piece of art Draw a character in the style of a chosen illustrator Draw the rainforest. 	<p>Make it: code it micro:bit</p> <ul style="list-style-type: none"> Flashing Heart Name Tag Smiley Buttons Dice (Use dice in Maths lesson) <p>Sensors</p> <ul style="list-style-type: none"> Sunlight sensor (Comparing plants in science) Step counter (PE running) Compass (orienteering) Thermometer (Comparing plants in science) 	<p>https://code.makewonder.com/cue/#/</p> <ul style="list-style-type: none"> Build a maze and code CUE to find his way around the maze. Code CUE to cross the road safely Use the Markers to draw different types of triangles/angles Code Cue to use Roman roads on a map of Britain. 	<ul style="list-style-type: none"> Topic research presentation Create a newsletter Story writing Comic book Present science results. 	<ul style="list-style-type: none"> Languages practise Storytelling Verbal feedback Puppet show Practise Times tables Skype field trip Mystery skype Present weather reports (green screen) Present science results. Character portrayal in Roman Britain



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Year 4	Software Focus	Software Focus	Software Focus	Software Focus	Software Focus	Software Focus
	Minecraft - Introduce block coding using code builder to build walls and lava towers - Use book and quill to evidence work with detailed text	Paint 3D - Use paint tools to turn 2D images into 3D images by tracing	Micro:Bits - Use block coding to programme simple games - Programme a Micro:bit to play music - Advanced sensor coding	CUE Robot Portal (makewonder.com) 	Sway - Explore options for displaying photos (comparison, group, stack, grid) - Change the emphasis on images to improve design	Flipgrid (Teams) / Skype - Record short video clips - View videos created by others - Edit recorded video by trimming beginning and end
	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link
	use sequence, selection, and repetition in programs; work with variables and various forms of input and output use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of	use sequence, selection, and repetition in programs; work with variables and various forms of input and output use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs design, write and debug programs that accomplish specific goals, including controlling or simulating physical	understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	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



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	ways to report concerns about content and contact	ways to report concerns about content and contact.	<p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>systems; solve problems by decomposing them into smaller parts</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	<p>presenting data and information</p> <p>use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>
	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas
	<ul style="list-style-type: none"> • Build a Viking boat • Build Parthenon, Greek theatre or Olympic stadium • Recreate map of Europe • Make a musical instrument • Make a self-portrait – Da Vinci 	<ul style="list-style-type: none"> • Da Vinci self-portraits • Recreate Da Vinci's art • Use paint to fake UFO photographs • Drawing animals (science) and their teeth. 	<p>Make it: code it micro:bit</p> <ul style="list-style-type: none"> • Rock, paper scissors • Coin flipper • Hot Potato • Tug-of-LED • Jukebox 	<ul style="list-style-type: none"> • Compete in Robot Olympics (who can get round the course fastest?) • Use buzzers to control robot 	<ul style="list-style-type: none"> • Make holiday (Marlow) brochures • Explain the water cycle • Animals and their teeth • Collaborate on an Italian recipe book • Profile Da Vinci 	<ul style="list-style-type: none"> • Using forms for class democracy (Vote on class reader/movie) • Make a capital city quiz using Forms or Kahoot




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	<ul style="list-style-type: none">• Make the leaning tower of Pisa		<ul style="list-style-type: none">• Frere Jacques loops• Radio treasure hunt• Spirit level• Make thermometers for changes of states• Use as switches and buzzers• Code alien messages (create language)			<ul style="list-style-type: none">• Present science findings <p>(W&G Claymation)</p>
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Year 5	Software Focus	Software Focus	Software Focus	Software Focus	Software Focus	Software Focus
	Minecraft - Use NPCs to provide information in Minecraft world - Collaborate on building projects in small groups	Paint 3D - Use keyboard shortcuts in Paint3D Keyboard shortcuts in apps (microsoft.com)	Micro:Bits - Programme Micro:bit to perform advanced tasks - Introduce Micro:bit accessories (car, LED wheel)	CUE Robot Portal (makewonder.com) 	Sway - use code to embed videos and tweets - record and add audio files to a Sway	Flipgrid (Teams) / Skype - Record short video clips - View videos created by others - Comment and respond to videos appropriately using text - Comment and respond to videos appropriately using video - Draw on screen whilst recording to create live animation
	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link	National Curriculum Link
	use sequence, selection, and repetition in programs; work with variables and various forms of input and output use technology safely, respectfully and responsibly; recognise acceptable/unacceptable	use sequence, selection, and repetition in programs; work with variables and various forms of input and output use technology safely, respectfully and responsibly; recognise acceptable/unacceptable	design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs design, write and debug programs that accomplish specific goals, including	understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration	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,



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	behaviour; identify a range of ways to report concerns about content and contact	behaviour; identify a range of ways to report concerns about content and contact.	use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	controlling or simulating physical systems; solve problems by decomposing them into smaller parts use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	evaluating and presenting data and information use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact
	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas
	<ul style="list-style-type: none"> • Build pyramids or Myan structures • Construct bridges 	<ul style="list-style-type: none"> • Create their own creature • Draw the solar system 	<ul style="list-style-type: none"> • Guitar chords • Burglar Alarm • Light Alarm • Data Logger • Make a compass • Hieroglyph messages • Programme train signals 	<ul style="list-style-type: none"> • Make a chocolate factory worker/assembly line • Programme to replicate the movement of the sun and moon • Construct bridges for robot to cross 	<ul style="list-style-type: none"> • Present information on topics • Biographies of characters or famous leaders • Mexican recipes 	<ul style="list-style-type: none"> • News reports • Movie trailers • Shakespeare • Make a quiz on north and south America in forms



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	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas	Lesson Ideas
	<ul style="list-style-type: none"> - Make Hogwarts - Make accurate mountain ranges Make air raid shelters 	<ul style="list-style-type: none"> - Japanese art - Design a creature - Perspective drawing of local place - Design Mayan masks 	<ul style="list-style-type: none"> - Mars Rover (drive the car, check temperature, compass, light sensor) - Plan a treasure hunt (compass, step counter) - Make Christmas lights - Use sensors with Cue for burglar alarms. - Use for buzzers and switches in science 	<ul style="list-style-type: none"> - Inspiration from Japanese robots - Make robot respond to 'magic' spells <p>Use cue to test burglar alarms</p>	<ul style="list-style-type: none"> - Inspiration from Japanese robots <p>Make robot respond to 'magic' spells</p>	<p>Inspiration from Japanese robots</p>