



Computing Curriculum Coverage and Outcomes Knowledge and Skills

Stage 1

Topic link	Year: 1 Term: Spring 2 Topic: Spring Time Maths and English	Year: 1 Term: Summer 2 Topic: What's at the beach? How my world works	Year: 2 Term: Summer 1 Topic: Going on Safari Beyond Bennerley	Year: 2 Term: Summer 2 Topic: At the Seaside English and Art	Year: 3 Term: Spring 2 Topic: Knights and Dragons How my world works	Year: 3 Term: Summer 2 Topic: Take me on a Journey Music
Coverage	<p>Coverage: <i>Exploring media – digital games</i></p> <p>To interact with digital games. To interact with digital games to practise key maths skills. To interact with digital games to practise key English skills.</p>	<p>Coverage: <i>Programming – cause and effect</i></p> <p>To explore cause and effect with technology. To repeat actions that have an effect.</p>	<p>Coverage: <i>Information – making choices</i></p> <p>To be able to make a choice using technology. To be able to make the correct choice using technology. To explore patterns on screens.</p>	<p>Coverage: <i>Exploring media – digital writing and art</i></p> <p>To explore mark making using technology. To intentionally make marks on technology. To explore letters using technology and keyboards.</p>	<p>Coverage: <i>Computing systems – using technology</i></p> <p>To explore interactive technologies. To explore computers and laptops.</p>	<p>Coverage: <i>Exploring media – digital songs and stories</i></p> <p>To listen to songs on technology. To engage with songs on technology.</p>
	<p>Programmes / software to use: Online games, iPad apps, whiteboard tools</p>	<p>Programmes / software to use: Online games, iPad apps, whiteboard tools, purple mash – music 2 explore, lan Bean</p>	<p>Programmes / software to use: Online games, iPad apps, whiteboard tools, 2Paint, choose it maker</p>	<p>Programmes / software to use: 2Paint, Tate paintt</p>	<p>Programmes / software to use: Chatter pix</p>	<p>Programmes / software to use: YouTube, Go Noodle, any other online songs</p>
Outcomes	<p>Knowledge: I know I can play games on technology. I know how to find a desired game on technology.</p>	<p>Knowledge: I know if I touch an interactive screen this has an effect. I know if I press a key on a keyboard or mouse this has an effect. I know toys can make noise or movement.</p>	<p>Knowledge: I know what 'choose' means. I know how to make a choice.</p>	<p>Knowledge: I know how to make marks on digital software, I know how to use a keyboard to create letters on the screen. I know how to draw simple lines or shapes using digital software.</p>	<p>Knowledge: I know what an iPad is. I know what a computer is. I know what an interactive whiteboard is.</p>	<p>Knowledge: I know technology plays songs. I know technology plays different songs. I know technology can involve stories.</p>
Outcomes	<p>Skills: I can interact with a game. I can interact with a game in the right way. I can practise key maths skills using a game. I can practise key English skills using a game. I can count using digital games.</p>	<p>Skills: I can interact with touch screens. I can interact with a keyboard. I can interact with a mouse. I can create a desired effect by touching an interactive screen. I can create a desired effect by using a computer. I can create noise or movement when playing with a toy. I can repeat actions that have an effect.</p>	<p>Skills: I can make a choice from options on a screen. I can make the right choice from options on a screen. I can make choices to have a desired effect. I notice patterns on screens.</p>	<p>Skills: I can make marks on an interactive screen. I can draw after an adult has selected a tool. I can select a tool to draw. I can select colours with support. I can enjoy drawing on technology.</p>	<p>Skills: I can interact with an iPad. I can interact with a computer. I can interact with an interactive whiteboard. I can identify print on technology. I can communicate about what I see on a screen. I can explore technology.</p>	<p>Skills: I can watch/listen to a song on technology. I can enjoy a song on technology. I can join in with a song on technology. I can gesture for a preferred song on technology. I can copy gestures or movements from a screen.</p>

				I can write some letters accurately using technology.		I can listen to stories. I can engage with stories.
	Prepares for Stage 2 Creating media	Prepares for Stage 2 Programming	Prepares for Stage 2 Data and information	Prepares for Stage 2 Creating media	Prepares for Stage 2 Computing systems and networks	Prepares for Stage 2 Creating media
Cross curricular computing activities	<p>Year 1 Autumn 1: Maths numerical patterns – digital games Year 1 Autumn 2: How my world works – sorting materials and making choices Year 1 Spring 1: Maths - cause and effect matching; English – character matching Year 1 Spring 2: Maths numerical patterns – digital games Year 1 Summer 1: How my world works – making choices with bugs (mini beast hotel) Year 1 Summer 2: How my world works – using technology (iPads / interactive whiteboards)</p> <p>Year 2 Autumn 1: PSHE/RSE - using technology Year 2 Autumn 2: My creativity – digital writing and patterns (snowflakes) Year 2 Spring 1: How my world works – cause and effects with shadows Year 2 Spring 2: RSE – internet safety digital games Year 2 Summer 1: Music – African music Year 2 Summer 2: English – mark making and digital writing; Art – beach scene</p> <p>Year 3 Autumn 1: Beyond Bennerley – making choices Year 3 Autumn 2: Beyond Bennerley – making choices Year 3 Spring 1: Music – rainbow and colour songs Year 3 Spring 2: How my world works – cause and effect with animal names Year 3 Summer 1: Maths numerical patterns – digital games Year 3 Summer 2: English – mark making and digital writing</p>					

Stage 2

Topic link	Year: 1 Term: Spring 2 Topic: Exploring our Neighbourhood Geography	Year: 2 Term: Spring 1 Topic: London Life Maths statistics	Year: 2 Term: Summer 1 Topic: The Animal Kingdom English	Year: 3 Term: Autumn 1 Topic: Blast off! History	Year: 3 Term: Spring 1 Topic: Messy Mixtures Art
	Builds on Stage 1 Programming	Builds on Stage 1 Information	Builds on Stage 1 Exploring media	Builds on Stage 1 Computing systems	Builds on Stage 1 Exploring media
Coverage	<p>Coverage: <i>Programming – Moving a robot</i></p> <p>To explain what a given command will do. To act out a given word. To combine forwards and backwards commands to make a sequence. To combine four direction commands to make sequences. To plan a simple program.</p>	<p>Coverage: <i>Data and information – Grouping data</i></p> <p>To label objects. To describe objects in different ways. To count objects with the same properties. To compare groups of objects. To answer questions about groups of objects.</p>	<p>Coverage: <i>Creating media – Digital writing</i></p> <p>To use a computer to write. To add and remove text on a computer. To identify that the look of text can be changed on a computer. To make careful choices when changing text. To explain why I used the tools that I chose.</p>	<p>Coverage: <i>Computing systems and networks – Technology around us</i></p> <p>To identify technology. To identify a computer and its main parts. To use a mouse in different ways. To use a keyboard to type on a computer. To use the keyboard to edit text.</p>	<p>Coverage: <i>Creating media – Digital painting</i></p> <p>To describe what different freehand tools do. To use the shape tool and the line tools. To make careful choices when painting a digital picture. To explain why I chose the tools I used.</p>

	To find more than one solution to a problem.		To compare typing on a computer to writing on paper.		To use a computer on my own to paint a picture. To compare painting a picture on a computer and on paper.
	Programmes / software to use: Blue-bots, ALEX	Programmes / software to use: 2graph, 2count, Wordspot	Programmes / software to use: Word, 2 Type	Programmes / software to use: Laptops, mouse, Purple Mash – computing	Programmes / software to use: 2paint
ENGAGEMENT PATHWAY Outcomes	Knowledge: I know if I touch a device this has an effect. I know if I press a key on a keyboard or mouse this has an effect on the device. I know how to give a device a command. I know how to move a device in different directions.	Knowledge: I know the names of objects. I know how to count objects. I know the words 'more' and 'less.' I know how to record findings in different ways, with support.	Knowledge: I know how to draw simple shapes using digital software, with support. I know how to use a keyboard to create some letters on the screen, with support. I know how to type a capital letter, with support. I know how to use simple tools for drawing or writing, with support.	Knowledge: I know what an interactive whiteboard is. I know what a computer is. I know what a keyboard is for. I know how to save my work with support. I know the main parts of a computer.	Knowledge: I know how to choose different tools on digital programs with support. I know how to choose different colours. I know how to use different paint tools.
Outcomes	Skills: I can interact with a device. I can interact with a keyboard. I can interact with a mouse. I can give a device a command. I can move a device in different directions using commands.	Skills: I can name objects using labels. I can count objects. I can begin to describe an object, with support. I can match objects to groups, with support. I can group similar objects, with support. I can record how many objects are in a group, with support. I can compare groups of objects, with support. I can record and share what I have found, with support.	Skills: I can make marks on an interactive screen. I can draw when an adult or myself have selected a tool. I can select colours with help. I can enter text into a computer. I can use letter and number keys. I can identify the toolbar and use some tools on word with help.	Skills: I can interact with a computer. I can interact with an interactive whiteboard. I can explore technology. I can name examples of technology in the classroom with support. I can switch a device on. I can use a mouse to open a programme. I can type my name on a computer.	Skills: I can draw lines on a screen using different tools. I can make marks on a screen using different tools. I can use the paint tools to draw a picture. I can choose paint tools and colours to create a piece of art. I can change the colours and brush sizes.
Outcomes	Knowledge: I know words that are commands. I know how to give a device a command. I know words that are directions. I know how to move a device in different directions. I know what debugging is. I know there are different commands that can lead to the same outcome.	Knowledge: I know words that can describe objects. I know how to count objects. I know what a label is. I know what a property of an object means. I know words that can be used to compare e.g. more / less. I know that graphs, charts and pictograms can record findings.	Knowledge: I know where the keys are on a keyboard. I know the names of keys on a keyboard. I know where to find the toolbar and tools like bold, italic, and underline. I know how to type a capital letter. I know the differences between typing and writing.	Knowledge: I know how technology can help us. I know name the main parts of a computer. I know how to save my work. I know what a keyboard is for.	Knowledge: I know how to select different tools on digital painting programs. I know how to select different colour choices. I know which tools were helpful. I know that different paint tools do different jobs. I know the differences between painting on a computer and on paper.
Outcomes	Skills: I can predict the outcome of a command on a device. I can run a command on a device. I can follow an instruction. I can give directions. I can compare forwards and backwards movements.	Skills: I can describe objects using labels. I can match objects to groups. I can count objects. I can group objects. I can describe an object. I can describe a property of an object.	Skills: I can open a word processor. I can enter text into a computer. I can use backspace to remove text. I can use letter, number, and space keys. I can explain what the keys that I have learnt about already do.	Skills: I can locate examples of technology in the classroom. I can switch on and log into a computer. I can use a mouse to click and drag. I can click and drag to make objects on a screen.	Skills: I can draw lines on a screen and explain which tools I used. I can make marks on a screen and explain which tools I used. I can use the paint tools to draw a picture. I can make marks with the square and line tools.

	<p>I can predict the outcome of a sequence involving forwards and backwards commands.</p> <p>I can start a sequence from the same place.</p> <p>I can compare left and right turns.</p> <p>I can experiment with turn and move commands to move a robot.</p> <p>I can predict the outcome of a sequence involving up to four commands.</p> <p>I can choose the order of commands in a sequence.</p> <p>I can debug my program</p> <p>I can explain what my program should do.</p> <p>I can identify several possible solutions.</p> <p>I can use two different programs to get to the same place.</p>	<p>I can find objects with similar properties.</p> <p>I can count how many objects share a property.</p> <p>I can group objects in more than one way.</p> <p>I can group similar objects.</p> <p>I can choose how to group objects.</p> <p>I can describe groups of objects.</p> <p>I can record how many objects are in a group.</p> <p>I can compare groups of objects.</p> <p>I can decide how to group objects to answer a question.</p> <p>I can record and share what I have found.</p>	<p>I can identify the toolbar and use bold, italic, and underline.</p> <p>I can change the font.</p> <p>I can select all of the text by clicking and dragging.</p> <p>I can select a word by double-clicking.</p> <p>I can say what tool I used to change the text.</p> <p>I can use 'undo' to remove changes.</p> <p>I can make changes to text on a computer.</p> <p>I can say why I prefer typing or writing.</p>	<p>I can use a mouse to open a program.</p> <p>I can type my name on a computer.</p> <p>I can delete letters.</p> <p>I can open my work from a file.</p>	<p>I can use the shape and line tools effectively.</p> <p>I can use the shape and line tools to recreate the work of an artist.</p> <p>I can choose appropriate shapes.</p> <p>I can create a picture in the style of an artist.</p> <p>I can choose appropriate paint tools and colours to recreate the work of an artist.</p> <p>I can change the colour and brush sizes.</p> <p>I can say whether I prefer painting using a computer or using paper.</p>
	Prepares for Stage 3 Programming or Stage 4 PEL	Prepares for Stage 3 Data and information or Stage 4 PEL generally	Prepares for Stage 3 creating media or Stage 4 PEL	Prepares for Stage 3 Computing systems and networks or Stage 4 PEL	Prepares for Stage 3 Creating media or Stage 4 PEL
Cross curricular computing activities	<p>Year 1 Autumn 1: History – memory box: changes within living memory photos etc.; English – digital writing</p> <p>Year 1 Autumn 2: Music – digital music (2beat, Garage Band)</p> <p>Year 1 Spring 1: Maths – statistics, data and information</p> <p>Year 1 Spring 2: Science – time lapse photography</p> <p>Year 1 Summer 1: Geography – use of Google Earth</p> <p>Year 1 Summer 2: History – online research or games</p> <p>Year 2 Autumn 1: Geography and Science – weather forecasting and online research</p> <p>Year 2 Autumn 2: Art – different materials</p> <p>Year 2 Spring 2: Art – faces on screens</p> <p>Year 2 Summer 2: English – letter writing</p> <p>Year 3 Autumn 2: Maths – position and direction with Bluebots</p> <p>Year 3 Spring 2: English – presentations; Science – time lapse growth</p> <p>Year 3 Summer 1: Geography – online maps and Google Earth; History – online research</p> <p>Year 3 Summer 2: Geography – online maps and Google Earth; History – online research</p> <p>Year 3 Autumn 1</p>				

Stage 3

Topic link	Year: 1 Term: Spring 1 Topic: The Battle of Hastings	Year: 1 Term: Summer 1 Topic: Good vs Bad Art	Year: 2 Term: Autumn 2 Topic: Our Bodies Science	Year: 2 Term: Spring 2 Topic: Vicious Vikings Maths	Year: 3 Term: Autumn 1 Topic: Press Play! Music	Year: 3 Term: Spring 1 Topic: Urban Life Art
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	Builds on Stage 2 Computing systems and networks	Builds on Stage 2 Programming	Builds on Stage 2 Programming	Builds on Stage 2 Data and information	Builds on Stage 2 Creating media	Builds on Stage 2 Creating media
Coverage	<p>Coverage: <i>Computing systems and networks – IT around us</i></p> <p>To recognise the uses and features of information technology. To identify the uses of information technology in the school. To identify information technology beyond school. To explain how information technology helps us. To explain how to use information technology safely. To recognise that choices are made when using information technology. (Guided internet research)</p>	<p>Coverage: <i>Programming - Programming animations</i></p> <p>To choose a command for a given purpose. To show that a series of commands can be joined together. To identify the effect of changing a value. To explain that each sprite has its own instructions. To design the parts of a project. To use my algorithm to create a program. (Creating hero/villain animations)</p>	<p>Coverage: <i>Programming – Robot algorithms</i></p> <p>To describe a series of instructions as a sequence. To explain what happens when we change the order of instructions. To use logical reasoning to predict the outcome of a program. To explain that programming projects can have code and artwork. To design an algorithm. To create and debug a program that I have written. (Programme robot to acts as food round a digestion model)</p>	<p>Coverage: <i>Data and information – Pictograms</i></p> <p>To recognise that we can count and compare objects using tally charts. To recognise that objects can be represented as pictures. To create a pictogram. To select objects by attribute and make comparisons. To recognise that people can be described by attributes. To explain that we can present information using a computer. (Stock taking in a shop linking to economic values logging data on digital graphs)</p>	<p>Coverage: <i>Creating media - Digital music</i></p> <p>To say how music can make us feel. To identify that there are patterns in music. To experiment with sound using a computer. To use a computer to create a musical pattern. To create music for a purpose. To review and refine our computer work.</p>	<p>Coverage: <i>Creating media - Stop-frame animation</i></p> <p>To explain that animation is a sequence of drawings or photographs. To relate animated movement with a sequence of images. To plan an animation. To identify the need to work consistently and carefully. To review and improve an animation. To evaluate the impact of adding other media to an animation. (Stop motion shadow stories)</p>
	<p>Programmes / software to use: Laptops, iPads, internet, Purple Mash – computing tools, internet safety, role model.</p>	<p>Programmes / software to use: ScratchJr, Purple Mash – 2Code, 2DIY3D, Incredibox (music)</p>	<p>Programmes / software to use: 2code, 2GO</p>	<p>Programmes / software to use: 2graph, Excel, Microsoft Word</p>	<p>Programmes / software to use: Chrome Music Lab, Incredibox, Purple Mash – 2Beat, 2Sequence, 2Explore, Busy Beats</p>	<p>Programmes / software to use: iPad stop motion app, Pivot Animator</p>
Outcomes	<p>Knowledge: I know some uses of computers. I know what IT stands for. I know that a computer is a part of IT. I know some uses of other information technology e.g. iPads. I know different rules for using IT.</p>	<p>Knowledge: I know what a sprite is. I know which commands to move a sprite. I know how to run my program. I know how to use different blocks. I know what will happen when I change a value. I know how to delete a sprite. I know what an algorithm is. I know how to test programs I have created.</p>	<p>Knowledge: I know a range of words that can be used in a sequence. I know a range of words that can be used for instructions. I know what an algorithm is. I know how to create different algorithms. I know how to use my algorithm to create a program. I know what debugging is.</p>	<p>Knowledge: I know what a tally chart is. I know which programs are good for showing and analysing data. I know what comparison words mean. I know how to collect data. I know why some information should not be shared.</p>	<p>Knowledge: I know adjectives that can describe music. I know how to give opinions. I know what rhythm means. I know which programs can create and edit music. I know what musical notes are. I know words that evaluate.</p>	<p>Knowledge: I know different types of animation. I know programs that can be used to create animations. I know how to make a flip book. I know how to make a stop frame animation. I know a story is made up of settings, characters and events. I know what a storyboard is. I know words that evaluate. I know what onion skinning is. I know how to make changes to an animation. I know what other media can be added to an animation e.g. sound recordings / music.</p>

<p>Outcomes</p>	<p>Skills: I can identify examples of computers. I can identify examples of IT. I can identify that some IT can be used in more than one way. I can sort school IT by what it's used for. I can find examples of information technology. I can sort IT by where it is found. I can demonstrate how IT devices work together. I can recognise common types of technology. I can say why we use IT. I can say how rules can help keep me safe. I can explain the need to use IT in different ways. I can identify the choices that I make when using IT. I can use IT for different types of activities.</p>	<p>Skills: I can compare different programming tools. I can use commands to move a sprite. I can use a Start block in a program. I can use more than one block by joining them together. I can change the value. I can find blocks that have numbers. I can add blocks to each of my sprites. I can show that a project can include more than one sprite. I can choose appropriate artwork for my project. I can create an algorithm for each sprite. I can decide how each sprite will move. I can add programming blocks based on my algorithm. I can use sprites that match my design.</p>	<p>Skills: I can choose a series of words that can be enacted as a sequence. I can follow instructions given by someone else. I can give clear instructions. I can show the difference in outcomes between two sequences that consist of the same commands. I can use an algorithm to program a sequence on a floor robot. I can use the same instructions to create different algorithms. I can compare my prediction to the program outcome. I can follow a sequence. I can predict the outcome of a sequence. I can explain the choices I made for my mat design. I can identify different routes around my mat. I can test my mat to make sure that it is usable. I can create an algorithm to meet my goal. I can explain what my algorithm should achieve. I can plan algorithms for different parts of a task. I can put together the different parts of my program. I can test and debug each part of the program.</p>	<p>Skills: I can compare totals in a tally chart. I can record data in a tally chart. I can represent a tally count as a total. I can enter data onto a computer. I can use a computer to view data in a different format. I can use pictograms to answer simple questions about objects. I can explain what the pictogram shows. I can organise data in a tally chart. I can use a tally chart to create a pictogram. I can answer 'more than'/'less than' and 'most/least' questions about an attribute. I can create a pictogram to arrange objects by an attribute. I can tally objects using a common attribute. I can choose a suitable attribute to compare people. I can collect the data I need. I can create a pictogram and draw conclusions from it. I can share what I have found out using a computer. I can use a computer program to present information in different ways.</p>	<p>Skills: I can identify simple differences in pieces of music. I can say what I do and don't like about a piece of music. I can create a rhythm pattern. I can explain that music is created and played by humans. I can play an instrument following a rhythm pattern. I can connect images with sounds. I can relate an idea to a piece of music. I can use a computer to experiment with pitch. I can explain how my music can be played in different ways. I can identify that music is a sequence of notes I can refine my musical pattern on a computer. I can add a sequence of notes to my rhythm. I can create a rhythm which represents an animal I've chosen. I can create my animal's rhythm on a computer. I can explain how I changed my work. I can listen to music and describe how it makes me feel. I can review my work.</p>	<p>Skills: I can create an effective flip book—style animation. I can draw a sequence of pictures. I can explain how an animation/flip book works. I can create an effective stop-frame animation. I can explain why little changes are needed for each frame. I can predict what an animation will look like. I can create a storyboard. I can evaluate the quality of my animation I can review a sequence of frames to check my work. I can use onion skinning to help me make small changes between frames. I can explain ways to make my animation better. I can improve my animation based on feedback. I can add other media to my animation. I can evaluate my final film. I can explain why I added other media to my animation.</p>
	<p>Prepares for Stage 4 Computing systems and networks</p>	<p>Prepares for Stage 4 Programming</p>	<p>Prepares for Stage 4 Programming</p>	<p>Prepares for Stage 4 Data and information</p>	<p>Prepares for Stage 4 Creating media</p>	<p>Prepares for Stage 4 Creating media</p>
<p>Cross curricular computing activities</p>	<p>Year 1 Autumn 1: Geography – research photos of habitats; Science – charts and recording results Year 1 Autumn 2: History – research then creation of a digital fact file, presentations on PowerPoint Year 1 Spring 2: Geography - use of Google Earth and online maps, online research of relevant geographical features Year 1 Summer 2: Geography – time lapse photography, uploading photos</p> <p>Year 2 Autumn 1: English – research recipes and advert PowerPoint Year 2 Spring 1: Geography – online maps and directions Year 2 Summer 1: Geography – research rivers of the world Year 2 Summer 2: Geography – online maps, Google Earth, mapping rivers from source to sea</p> <p>Year 3 Autumn 2: History - research into Native Americans; Geography – places in USA, online maps and Google Earth</p>					

Year 3 Spring 2: History – researching spread of Roman Empire; Science – compare and contrast evolution of crocodiles and dogs online research
 Year 3 Summer 1: Science – research into states of matter
 Year 3 Summer 2: Music – creating own music videos combining music and performance

Stage 4 Pre-Entry Level

Topic link	Year: 1 Term: Autumn 1 Preparing for Adulthood	Year: 1 Term: Autumn 2 Cultural studies	Year: 2 Term: Autumn 1 Preparing for Adulthood	Year: 2 Term: Spring 2 Maths
	Builds on Stage 2 Programming	Builds on Stage 2 Creating media	Builds on Stage 2 Computing systems and networks	Builds on Stage 2 Data and information
Coverage	<p>Coverage: AQA UAS 108195 – Basic Coding with support</p> <p>To know how to access a coding app. To be able to follow instructions. To be able to input and run a code with support. To control Blue-bots using a set of instructions.</p>	<p>Coverage: Creating media – Digital photography</p> <p>To use a digital device to take a photograph. To make choices when taking a photograph. To describe what makes a good photograph. To decide how photographs can be improved. To use tools to change an image. To recognise that photos can be changed.</p>	<p>Coverage: AQA UAS 117004 - Digital skills for everyday life</p> <p>To be able to use the internet in an everyday context, To be able to use messaging software with support. To be able to use one feature on a digital device.</p>	<p>Coverage: Data and information – Pictograms</p> <p>To recognise that we can count and compare objects using tally charts. To recognise that objects can be represented as pictures. To create a pictogram. To select objects by attribute and make comparisons. To recognise that people can be described by attributes. To explain that we can present information using a computer.</p>
	Programmes / software to use: iPads, Blue-bot, Purple Mash – 2Code	Programmes / software to use: iPad camera	Programmes / software to use: Laptops, iPads, internet, Purple Mash - computing	Programmes / software to use: 2count, 2graph
Outcomes	<p>Knowledge: I know how to open up the espresso coding application on an I-Pad. I know what an instruction is. I know how to run a code. I know how to move a Blue-bot. I know how Blue-bots follow a series of programmed instructions to perform a task.</p>	<p>Knowledge: I know how to capture a digital photo with support. I know the process of taking a good photograph with support. I know what portrait and landscape mean with support. I know how to retake a photo with support. I know that images can be changed with support.</p>	<p>Knowledge: I know every day uses of the internet. I know how to open and close an item of messaging software, e.g. text message, email or group chat, with support.</p>	<p>Knowledge: I know what a tally chart is. I know which programs are good for showing and analysing data. I know what comparison words mean. I know how to collect data. I know why some information should not be shared.</p>
Outcomes	<p>Skills: I can follow the instructions to produce a simple code. I can check a code to see if it works.</p>	<p>Skills: I can recognise what devices can be used to take photographs.</p>	<p>Skills: I can demonstrate how to safely start up and shut down a digital device that has</p>	<p>Skills: I can compare totals in a tally chart. I can record data in a tally chart. I can represent a tally count as a total.</p>

	I can control a Beebot using a simple set of instructions.	I can talk or gesture about how to take a photograph with support. I can take photos in both landscape and portrait format with support. I can identify a good photograph with support. I can identify what is wrong with a photograph with support. I can explore the effect that light has on a photo with support. I can use a tool to achieve a desired effect with support. I can edit a photo with support.	internet access, e.g. computer, laptop, tablet, smartphone. I can identify one feature of a digital device and demonstrate its use with support. I can create a message with support. I can send a message with support. I can open a message with support.	I can enter data onto a computer. I can use a computer to view data in a different format. I can use pictograms to answer simple questions about objects. I can explain what the pictogram shows. I can organise data in a tally chart. I can use a tally chart to create a pictogram. I can answer 'more than'/'less than' and 'most/least' questions about an attribute. I can create a pictogram to arrange objects by an attribute. I can tally objects using a common attribute. I can choose a suitable attribute to compare people. I can collect the data I need. I can create a pictogram and draw conclusions from it. I can share what I have found out using a computer. I can use a computer program to present information in different ways.
Cross curricular computing activities	<p>Year 1 Autumn 1: Culture studies – taking photos of drama performances Year 1 Spring 1: Culture studies – researching European cities Year 1 Spring 2: RSE – online relationships Year 1 Summer 1: Beyond Bennerley – online timetables Year 1 Summer 2: Science – virtual experience of space</p> <p>Year 2 Autumn 1: Maths – interactive money games Year 2 Autumn 2: Careers – taking photos of volunteering Year 2 Spring 1: Culture studies – researching British culture Year 2 Spring 2: RSE – internet safety Year 2 Summer 1: English – use of Word and presenting information Year 2 Summer 2: Maths – interactive games</p>			

Stage 4 Entry Level

Topic link	Year: 1 Term: Autumn 2 Preparing for Adulthood	Year: 1 Term: Autumn 2 Cultural studies	Year: 2 Term: Autumn 1 Preparing for Adulthood	Year: 2 Term: Autumn 1 Maths	Year: 2 Term: Autumn 2 Culture Studies
	Builds on Stage 3 Programming	Builds on Stage 3 Creating media	Builds on Stage 3 Creating media	Builds on Stage 3 Data and information	Builds on Stage 3 Computing systems and networks
Coverage	Coverage: AQA UAS 76197– Basic Coding and Programming To be able to sequence instructions to code in different contexts. To predict what happens when the code is changed.	Coverage: Creating media – Digital photography To use a digital device to take a range of photographs in different orientations. To make choices when taking a photograph.	Coverage: AQA UAS 110831 – ICT: Functional skills using Word To insert different items on to a document. To change the layout of a page. To use a range of tools, e.g. bullet point, bold.	Coverage: AQA UAS 117195 Interpreting and Representing Data To extract key information from at least two lists, tables, diagrams and charts. To create a tally chart based on a data set.	Coverage: Computing systems and networks – The Internet To describe how networks physically connect to other networks. To recognise how networked devices make up the internet.

	To design a range of algorithms in different contexts. To create and debug programs in different contexts.	To describe what makes a good photograph. To decide how photographs can be improved. To use tools to change an image. To recognise that photos can be changed.	To be able to edit fonts. To be able to spell check work. To be able to use a digital thesaurus.	To create a frequency table from a data set and tally chart. To construct at least two simple line graphs and bar charts. To construct a pictogram based on a data set. To label at least two diagrams and charts appropriately. To use given line graphs, pictograms and bar charts to make a minimum of two data comparisons.	To outline how websites can be shared via the World Wide Web (WWW). To describe how content can be added and accessed on the World Wide Web (WWW). To recognise how the content of the WWW is created by people. To evaluate the consequences of unreliable content.
	Programmes / software to use: Pro-bot, ALEX, Espresso coding, iPads, Purple Mash – 2Code	Programmes / software to use: iPad camera	Programmes / software to use: Word	Programmes / software to use: From 2Graph to Excel	Programmes / software to use: Laptops, iPads, internet
Outcomes	Knowledge: I know how Pro-bots follow a series of programmed instructions to perform a task. I know how to control a Beebot using a simple set of instructions. I know what an algorithm is and how to apply them in different contexts. I know how to create a range of different algorithms. I know how to use my algorithm to create a program in different contexts. I know what debugging is and how to do it in different contexts.	Knowledge: I know how to capture a digital photo. I know the process of taking a good photograph. I know what portrait and landscape mean. I know how to retake a photo. I know that images can be changed.	Knowledge: I know where the insert functions are on the toolbar. I know that orientation of a page is under the layout options. I know what the icons look like for bullet points and font changes. I know how to insert textboxes and pictures. I know I can right click to use the spell check.	Knowledge: I know what a tally, line, frequency and bar chart is. I know which programs are good for showing and analysing data. I know the meaning of a range of comparison words. I know different ways to collect data. I know why some information should not be shared and the consequences of sharing some information. I know the main different elements in charts, e.g. title, axis, scale, key.	Knowledge: I know why a network needs protecting. I know what devices are networked and how they connect. I know that the internet is used to provide many services. I know that the World Wide Web contains websites and web pages. I know that internet services can be used to create content online. I know that there are rules to protect content. I know that not everything on the World Wide Web is true.
Outcomes	Skills: I can open up the Espresso Coding or ALEX application on an i-Pad. I can follow instructions to produce a simple code. I can run the code and check it works. I can create a simple set of instructions to control a Pro-bot. I can give clear instructions in different contexts. I can use the same instructions to create different algorithms in different contexts. I can predict the outcome of a sequence in different contexts. I can test and debug programs in different contexts.	Skills: I can recognise what devices can be used to take photographs. I can talk or gesture about how to take a photograph. I can take photos in both landscape and portrait format. I can identify a good photograph. I can identify what is wrong with a photograph. I can explore the effect that light has on a photo. I can use a tool to achieve a desired effect. I can edit a photo.	Skills: I can insert a table, header and footer, and column. I can change page orientation. I can edit the font by using underline, bold and italic. I can edit the font by using underline, bold and italic. I can change the style and size of a font. I can use spellchecker correctly. I can use a digital thesaurus.	Skills: I can compare different data sets. I can record data in a range of charts. I can enter data onto a computer. I can use a computer program to present information in different ways. I can label charts accurately. I can construct different charts.	Skills: I can demonstrate how information is shared across the internet. I can describe the internet as a network of networks. I can describe how to access websites on the WWW. I can explain the types of media that can be shared on the WWW. I can explain what media can be found on websites. I can explain that websites and their content are created by people. I can explain why I need to think carefully before I share or re-share content.

					I can explain why some information I find online may not be honest, accurate, or legal.
Cross curricular computing activities	<p>Year 1 Autumn 1: Culture studies – researching a European country Year 1 Spring 1: RE – explore and research religious art and architecture Year 1 Spring 2: RSE – online relationships Year 1 Summer 1: Beyond Bennerley – online timetables Year 1 Summer 2: Science – virtual experience of space</p> <p>Year 2 Autumn 1: Careers – researching jobs Year 2 Autumn 2: Culture studies – design a chocolate bar using digital tools Year 2 Spring 1: Maths – interactive games Year 2 Spring 2: RSE – internet safety Year 2 Summer 1: Careers – applying for jobs Year 2 Summer 2: Enterprise – digital advertising</p>				