



PRIMARY COMPUTING CURRICULUM

*Revised in line with the Research Review Series for
Computing 2022*



EYFS HT1 Identity & Community 'Ourselves, Our Families, Our Community'	EYFS HT2 Peace, Conflict & Security 'People who Keep us safe'	EYFS HT3 Sustainable Development 'Winter Wonderland '	EYFS HT4 Diversity & Inclusion 'Roundhay Rocks -All Different, All Equal'	EYFS HT5 Power & Justice 'All things bright and beautiful'	EYFS HT6 Good Health & Well Being 'Healthy Bodies and Minds '
<p style="text-align: center;">E-Safety Spotlight (1hr)</p> <p>Know: That for most people the internet is an integral part of life and has many benefits</p>	<p style="text-align: center;">E-Safety Spotlight (1hr)</p> <p>Know: The risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing.</p>	<p style="text-align: center;">E-Safety Spotlight (1hr)</p> <p>Know: The importance of keeping personal information private</p>	<p style="text-align: center;">E-Safety Spotlight (1hr)</p> <p>Know: Where and how to report things that concern you.</p>	<p style="text-align: center;">E-Safety Spotlight (1hr)</p> <p>Know: What to do if you see something that you don't like on a computer/electronic device. Managing Self ELG: <i>Explain the reasons for rules, know right from wrong and try to behave accordingly.</i></p>	<p style="text-align: center;">E-Safety Spotlight (1hr)</p> <p>Know: How to respond safely to adults that you do not know. Creating with Materials ELG: <i>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</i></p>
<p style="text-align: center;"><u>Continuous Provision</u></p> <p>Do: A range of technology is available in the classroom for children to access both independently and with an adult.</p> <ul style="list-style-type: none"> • Touch screen computer • iPads • Torches • Laptops • Remote controls • Battery operated toys • CD Player • Mobile phones • Touch screen SMART board • Technological toys with knobs for pulleys • Cameras • children to access Repeated Read texts using QR codes on the iPads • Completes a simple program on electronic devices • Explore how things work • Develop their small motor skills so that they can use a range of tools competently, safely and confidently. • Using internet during TTS or Talk time 		<p style="text-align: center;"><u>Outdoor Learning</u></p> <p>Do:</p> <ul style="list-style-type: none"> • Children to take iPads/cameras on welly walks/outdoor play/outdoor lessons to record their own learning. • Children to use iPads to sequence their daily activities and present this to the class. • Provide children with frequent opportunities for exploring a range of technology. • Encourage use of technology for a range of purposes. • Forest School: torches, construction tools • Switching lights off in reading den 		<p style="text-align: center;"><u>Vocab</u></p> <p>Camera: A digital camera is a hardware device that takes photographs and stores the image as data on a memory card. Computer: A device that takes input, processes it, then produces output. Control: In general, control refers to the ability to manage, organise, or run something on a computer. Emoticon / Emoji: The use of icons or text to portray mood or facial expression, e.g. :) when happy and :(when sad. Google: Is one of a number of search engines that help us find information on the web. Information: Data processed and/or presented to users in a meaningful way. Instructions: Computer instructions are a set of steps. Internet: The global collection of computer networks and their connections, all using shared protocols (TCP/IP) to communicate. iPad/tablet: The iPad and tablets are a type of hand held computer. Keyboard: A board of keys. One of the primary input devices used with a computer. Printer: A printer is an external hardware output device that takes the electronic data stored on a computer or other device and generates a hard copy of it. QR Code: A QR code (short for "quick response" code) is a type of barcode that contains a matrix of dots. It can be scanned using a QR scanner or a smartphone with built-in camera.</p>	

Year 1 HT1 Identity & Community	Year 1 HT2 Peace, Conflict & Security	Year 1 HT3 Sustainable Development	Year 1 HT4 Diversity & Inclusion	Year 1 HT5 Power & Justice	Year 1 HT6 Good Health & Well Being
<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: That for most people the internet is an integral part of life and has many benefits</p> <p>NC links</p> <p>1 day Mouse and Keyboard Skills</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Move the mouse or trackpad and left click to select an object. • Drag and drop with mouse or trackpad to move objects around the screen. • Find letters or numbers on a keyboard. • Begin touch typing with home row keys. <p>NC links <i>To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: Bullying and cyberbullying</p> <p>1 day Digital Art And Design</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Change the colour of individual pixels to accurately re-create basic artwork. • Make changes where required. • Change the colour of individual pixels to accurately re-create detailed artwork. <p>NC links <i>Use technology purposefully to create digital content.</i></p> <p>Know how to:</p> <ul style="list-style-type: none"> • Change the colour and pattern of elements. • Position and rotate objects on a design. • Position objects in relation to each other. • Resize, rotate, flip and arrange objects behind/in front of each other. <p>NC links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: That people sometimes behave differently online including pretending to be someone that they are not.</p> <p>1 day Text and Images</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Change the background colour of a page. • Add, resize and position images (pictures) on a page. • Type and position text on a page, if possible using capital letters and punctuation. • Label pictures with text. • Use word-banks for writing sentences about pictures. <p>NC links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: That the same principles apply to online relationships as face to face relationships, including the importance of respect for others online including when we are anonymous.</p> <p>1 day Music Creation And Comic Creation</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Add, resize and organise colour or picture backgrounds. • Add, resize, organise characters/object to different panels. • Add narration using text and direct speech using speech bubbles. <p>NC links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p>Know how to:</p> <ul style="list-style-type: none"> • Create a rhythm using a pattern of beats • Create digital sounds using patterns and shapes. • Create a simple melody using patterns and adjust tempo. <p>NC links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: the rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them</p> <p>1 day Unplugged Activities: Beebots</p> <p>Computer Science</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Place instructions into the correct order (sequence) to make something work. • Use direction arrows to move a Beebot to achieve an objective. • Predict a route and sequence direction commands (algorithm) to achieve an objective. Correct the errors if necessary (debug). • Predict a route and sequence distance commands to program a Beebot to achieve an objective. <p>NC links <i>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: The benefits of rationing time online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing.</p> <p>1 day Introduce Programming</p> <p>Computer Science</p> <p>Know how to:</p> <ul style="list-style-type: none"> • Place instructions into the correct order (sequence) to make something work. • Use direction arrows to move an on-screen object (character/sprite) to achieve an objective. • Predict a route and sequence direction commands (algorithm) to achieve an objective. Correct the errors if necessary (debug). • Predict a route and sequence distance commands to program an on-screen object to achieve an objective. • Predict and sequence movement and pen commands to program the drawing of different 2D shapes. • Sequence code blocks, including movements and execute (start program) blocks to write a program to achieve an objective. <p>NC links <i>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.</i></p>

Year 2 HT1 Identity & Community	Year 2 HT2 Peace, Conflict & Security	Year 2 HT3 Sustainable Development	Year 2 HT4 Diversity & Inclusion	Year 2 HT5 Power & Justice	Year 2 HT6 Good Health & Well Being
<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That for most people the internet is an integral part of life and has many benefit The benefits of rationing time online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others’ mental and physical wellbeing. <p>1 day Recognise uses of IT (DL) and Develop Programming (CS) Digital Literacy (DL) Computer Science (CS)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Understand what makes a computer a computer. Understand computers store and follow instructions. Spot digital technology in school. Understand how different technology helps us. (DL) <p>NC Links <i>Recognise common uses of information technology beyond school.</i></p> <p>Know how to:</p> <ul style="list-style-type: none"> Create and debug simple programs by selecting code blocks, placing them in the correct sequence and executing a program. Use logical reasoning to predict the behaviour of simple programs. Simplify a program by using a loop. (CS) <p>NC Links <i>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</i> <i>Create and debug simple programs.</i> <i>Use logical reasoning to predict the behaviour of simple programs.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: Bullying and cyberbullying</p> <p>1 day Programming with Scratch Jr Computer Science</p> <p>Know how to:</p> <ul style="list-style-type: none"> Program movements. Program outputs for audio or text. Find errors in a program. Program inputs. Program selection/conditions (if one sprite hits another) <p>NC Links <i>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.</i> <i>Create and debug simple programs.</i> <i>Use logical reasoning to predict the behaviour of simple programs.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: That people sometimes behave differently online including pretending to be someone that they are not.</p> <p>½ Day E-Safety (DL)</p> <ul style="list-style-type: none"> What are the dangers of sharing photos online? People online are not always who they say they are. Trusting information online. Using the Internet responsibly. Being respectful. <p>NC Links <i>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.</i></p> <p>1 day Introduce Data Handling (IT) And Internet Research (DL) Information Technology (IT) Digital Literacy (DL)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Understand what data is and collect it as a tally. Use software to label a pictogram and add data to each column. Edit a table with correct titles and numbers. Use software to create a bar chart/pie chart/line chart suitable for the data. Interpret a pictogram/bar chart/line chart. (IT) <p>NC Links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p> <p>Know how to:</p> <ul style="list-style-type: none"> Understand how a web-page displays information in different ways; text, images, videos and interactive elements. Use a web-page to answer questions. (DL) <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: That the same principles apply to online relationships as face to face relationships, including the importance of respect for others online including when we are anonymous</p> <p>1 day E-book Creation Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Add a book cover with title, author, colour and image. Add multiple pages based on a theme. Add text on different pages. Add images on different pages to match the theme/text. Add voice recordings to match the text and theme. <p>NC Links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: the rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them</p> <p>1 day Introduction to Animation Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Add a background and objects to a frame (including text) Copy/clone a frame and move objects to create an animation, including flipping objects. Create an animation with multiple objects moving simultaneously. Create screen-recording animation (<i>optional, requires iPad</i>). Create stop-motion animation with photos (<i>optional, requires iPad</i>). Create animated drawings of characters by cropping photos and adjusting points of movement. <p>NC Links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know: How to critically consider their online friendships and associated risks of strangers (including online).</p> <p>1 day Digital Art Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Use lines and fill tools to make interesting patterns. Add a variety of shapes (outlines and fill) and label them with text. Re-create graphics using pixels with different colours. <p>NC Links <i>Use technology purposefully to create, organise, store, manipulate and retrieve digital content.</i></p>

Year 3 HT1 Identity & Community	Year 3 HT2 Peace, Conflict & Security	Year 3 HT3 Sustainable Development	Year 3 HT4 Diversity & Inclusion	Year 3 HT5 Power & Justice	Year 3 HT6 Good Health & Well Being
<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That for most people the internet is an integral part of life and has many benefits The benefits of rationing time online, the risks of excessive time spent on electronic devices and the impact of positive and negative content online on their own and others' mental and physical wellbeing. <p>1 day Programming in Scratch</p> <p>Computer Science (CS)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Design, write and debug programs that accomplish specific goals. (Including outputs) Use repetition in programs. Work with various forms of inputs; keyboard, mouse and touch screen. Write programs to simulate physical systems. <p>NC Links <i>Design, write and debug programs that accomplish specific goal, including simulating physical systems. Use sequence and repetition in programs; work with various forms of input.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That the internet can be a negative place where online abuse, cyberbullying and trolling and harassment can take place which can have a negative impact on mental health. Where and how to report concerns and get support <p>1 day Comic Creation (IT) And Infographics (IT) Information Technology (IT) Comic Creation</p> <p>Know how to:</p> <ul style="list-style-type: none"> Add, resize and organise colour or picture backgrounds. Add, resize, organise characters/objects to different panels. Add narration using text and direct speech using speech bubbles. Save comic with name and title. Add audio recordings (optional). <p>NC Links <i>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.</i></p> <p>Infographics</p> <p>Know how to:</p> <ul style="list-style-type: none"> Understand what an infographic is and why we use them. Search for and add suitable graphic elements. Add and format suitable titles and text. Label an image with arrows and text. <p>NC Links <i>Design and create content that accomplish given goals.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> How to be a discerning customer of information online including understanding that information is ranked, selected and targeted. <p>½ Day E-Safety</p> <p>Digital Literacy (DL)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Understand what to do if something upsets you online. Understand why and how people can be nasty online. Describe the term 'sharing online' and why we need to get permission to share photos and videos of other people. Understand why people pretend to be someone else online. Understand why we only talk to people we know in the real world, when online. Understand why we should not always trust what we read online and how to check Understand the importance of being kind in the real world and also online. Understand the importance of using avatars and how to make them. <p>NC Links <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>1 day Document editing and Creation (IT) And 3D Design (IT) Information Technology (IT) Document Editing and Creation</p> <p>Know how to:</p> <ul style="list-style-type: none"> Copy and Paste text and images. Find and replace words Format text for a purpose. Add bullet points to make lists. Experiment with keyboard shortcuts. <p>NC Links <i>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.</i></p> <p>3D Design</p> <p>Know how to:</p> <ul style="list-style-type: none"> Understand and use 3D space on a grid. Design cities/towns for a purpose and to a budget. Re-create or design familiar 3D models using cubes, such as tables and chairs. Use chisel tool to improve and adapt models. Colour individual blocks or whole models. <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That the same principles apply to online relationships as face to face relationships, including the importance of respect for others online including when we are anonymous <p>1 day Music Creation (IT) And Branching Database (IT) Information Technology (IT)</p> <p>Music Creation</p> <p>Know how to:</p> <ul style="list-style-type: none"> Create ascending and descending scales. Add chords evenly across the scales. Add arpeggios and melodies. Add a steady and even rhythm. Use sampled sounds to create an effective mix. Build beats, melody (tones) and effects. <p>NC Links <i>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.</i></p> <p>Branching Database</p> <p>Know how to:</p> <ul style="list-style-type: none"> Add and label objects within a branching database. Ask questions to sort (classify) objects. <p>NC Links <i>Collect, classify and present data.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> the rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them <p>1 day Digital Art (IT) Information Technology (IT)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Use various lines and fill tools plus copy/paste and rotation to create pattern effects. Use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects. Use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics. <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> What sorts of boundaries are appropriate in friendships with peers and others (including in a digital context) How to respond safely and appropriately to adults they may encounter (in all contexts, including online) whom they do not know <p>1 day Programming in Kodu (CS) Computer Science (CS)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Create a 3D place using various design tools Write a program to control a character using inputs Write a program with conditions to create an if statement (If the character touches an object it will disappear) Add a multi-player aspect Write a program with variables (scoring system) Program operators (equals) to achieve a score and win a game. <p>NC Links <i>Design, write and debug programs that accomplish specific goal, including simulating physical systems. Use sequence, selection, and repetition in programs; work with various forms of input.</i></p>

Year 4 HT1 Identity & Community	Year 4 HT2 Peace, Conflict & Security	Year 4 HT3 Sustainable Development	Year 4 HT4 Diversity & Inclusion	Year 4 HT5 Power & Justice	Year 4 HT6 Good Health & Well Being
<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That for most people the internet is an integral part of life and has many benefits How to consider the effect of their online actions on others and know how to recognize and display respectful behaviour online. <p>1 day Programming in Scratch</p> <p>Computer Science (CS) Information Technology (IT) Digital Literacy (DL)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Program inputs with loops, selection and sensing for interactions. Work with variables and various forms of input and output. Debug programs that accomplish goals. (correcting errors) Use selection, data variables and operators. Program a virtual robot using Scratch blocks. <p>NC Links <i>Design, write and debug programs that accomplish specific goals. Use sequence, selection, and repetition in programs; work with various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> The importance of keeping personal information private That people sometimes behave differently online including pretending to be someone that they are not. <p>1 day Video Editing (IT) And Internet Research (DL)</p> <p>Computer Science (CS) Information Technology (IT) Digital Literacy (DL)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Add scene images. Add scripted voiceover audio, adjust the volume and crop clips (including splitting a clip). Add more clips and use transition effects. Add titles. Use elements such as shapes. Add music background music and adjust the volume. Export a project. <p>NC Links <i>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.</i></p> <p>Know how to:</p> <ol style="list-style-type: none"> Use search technologies to find specific pieces of information. Understand features of an Internet Browser. Reference the correct source of information. Be discerning in evaluating digital content. Check the internet for fake news by cross-referencing facts. <p>NC Links <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That the internet can be a negative place where online abuse, cyberbullying and trolling and harassment can take place which can have a negative impact on mental health. Where and how to report concerns and get support <p>½ Day E-Safety Digital Literacy (DL)</p> <p>Know how to:</p> <ul style="list-style-type: none"> Understand what to do if something upsets you online. Understand why and how people can be nasty online. Describe the term ‘sharing online’ and why we need to get permission to share photos and videos of other people. Understand why people pretend to be someone else online. Understand why we only talk to people we know in the real world, when online. Understand why we should not always trust what we read online and how to check Understand the importance of being kind in the real world and also online. Understand the importance of using avatars and how to make them. <p>NC Links <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>1 day E-Book Creation (IT) And Inside a Computer (DL)</p> <p>Information Technology Digital Literacy (DL)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Choose a suitable page shape and add a title and subtitle. Change the background colour/texture of a page. Add, resize and change the colour of a shape then copy and paste it. Search for and add suitable images then resize and position them. Create another page with a background, image, shapes and text. Add an audio recording of the page text, including hiding it behind an object. Use hyperlinks for navigation between the pages. <p>NC Links <i>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.</i></p> <p>Know how to:</p> <ol style="list-style-type: none"> Understand what important parts of inside a computer or mobile device do to help with the performance (CPU, Fan, Hard Drive, RAM, Graphics Card). Understand that memory is measured in bytes and gigabytes. Use search filters on websites to find suitable information. <p>NC Links <i>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> How to be a discerning customer of information online including understanding that information is ranked, selected and targeted. How information and data is shared and used online <p>1 day Data Handling</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Change appearance of cells in a spreadsheet (fill colour and border) then add and align text. Find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title. <p>NC Links <i>Collecting, analysing, evaluating and presenting data and information.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> the rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them <p>1 day Animation</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Create a stop-motion video by duplicating slides that include backgrounds and shapes. Create animation using transition and animation effects (morph, motion paths, pulse etc), including taking and editing a screenshot. Animate individual elements of objects. Create animated GIF files by animating pixels. <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> What sorts of boundaries are appropriate in friendships with peers and others (including in a digital context) How to respond safely and appropriately to adults they may encounter (in all contexts, including online) whom they do not know <p>1 day 3D Design</p> <p>Information Technology (IT)</p> <p>Know how to: 3D Village Pupil Activity Pack skills:</p> <ol style="list-style-type: none"> Understand 3D spacial awareness. Add 3D shapes, resize, adjust height, duplicate and use the different perspective. Re-create different types of buildings using 3D shapes. Create roads/paths by adjusting the height of 3D shapes. Add windows and door shapes. <p>Lego Modelling Pupil Activity Pack skills:</p> <ol style="list-style-type: none"> Add, move, change colour and duplicate a brick. Rotate bricks. Use sloping bricks and special bricks for a purpose. Change the transparency of bricks. <p>NC Links <i>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</i></p>

Year 5 HT1 Identity & Community	Year 5 HT2 Peace, Conflict & Security	Year 5 HT3 Sustainable Development	Year 5 HT4 Diversity & Inclusion	Year 5 HT5 Power & Justice	Year 5 HT6 Good Health & Well Being
<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That for most people the internet is an integral part of life and has many benefits How to consider the effect of their online actions on others and know how to recognize and display respectful behaviour online - including when we are anonymous. <p>1 day Programming in Scratch</p> <p>Computer Science (CS)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Program inputs for control, selection (conditions) and sensing for interaction and data variables for scoring and a game timer. Program distance sensing and movement. Program Inputs, outputs, loops, conditions, sensing and variables. Program list variables that chooses randomly. <p>NC Links <i>Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts.</i> <i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</i> <i>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> The importance of keeping personal information private That people sometimes behave differently online including pretending to be someone that they are not. <p>1 day Text-based Programming</p> <p>Computer Science (CS)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Change the variables of text-based commands. Write text-based commands accurately and use fill effects, stamps and functions. Write text-based commands to program digital art. Write text commands/functions to program keyboard inputs in a game. (Not compatible with iPad/tablet unless using physical keyboard) Programming a Logo turtle to move and use pen. Use co-ordinates in with a Logo turtle. Print labels in Logo. Program a loop (repetition) and shapes in Logo Turtle. Program colours in Logo turtle. Program variables in Logo turtle. <p>NC Links <i>Use sequence and repetition in programs; work with variables. Correct errors.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That the internet can be a negative place where online abuse, cyberbullying and trolling and harassment can take place which can have a negative impact on mental health. Where and how to report <p>½ Day E-Safety Digital Literacy (DL)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Keep personal information private. Respect and protect against online bullies. Understand the consequences of sharing photo/videos online. Understand the term digital footprint. How can we check online content is trustworthy. How and where and who can we report concerns we have to. Understand the pitfalls of in-app purchases. <p>NC Links <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>1 day App Design Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Adjust slide size to mimic a phone/tablet size. Add text and images to a slide. Add icons and text to use as navigation. Duplicate slides to create multiple pages of the app. Create hyperlinks to create navigation. <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> Why social media, some computer games and online gaming are age restricted <p>1 day Music Creation (IT) And Computer Networks and the Internet (DL)</p> <p>Information Technology (IT) Digital Literacy (DL)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Layer tracks using sounds and effects. Create effective instrument tracks. Edit tracks and effectively adjust volume and add effects <p>NC Links <i>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.</i></p> <p>Know how to:</p> <ol style="list-style-type: none"> Understand Computer Networks, Internet and Cloud Computing and how they help us. What is email and how can we use it safely? Understand how and why we collaborate online (including blogging). <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> How to be a discerning customer of information online including understanding that information is ranked, selected and targeted and how information and data is shared and used online. the rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them <p>1 day Data Handling</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Select and use non-adjacent cells plus resize multiple cell widths and copy/paste cells. Use formulae to find totals, averages and maximum/minimum numbers. Find data and create a spreadsheet to suit it. Search a database for specific information. <p>NC Links <i>Select, use and combine a variety of software (including internet services). Collecting, analysing, evaluating and presenting data and information.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> What sorts of boundaries are appropriate in friendships with peers and others (including in a digital context) How to respond safely and appropriately to adults they may encounter (in all contexts, including online) whom they do not know <p>1 day Physical Devices</p> <p>Computer Science (CS)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Understand that computers use physical inputs and outputs and give examples. Program physical inputs, outputs (e.g program LED lights) and random variables. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. <p>NC Links <i>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.</i> <i>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</i></p>

Year 6 HT1 Identity & Community	Year 6 HT2 Peace, Conflict & Security	Year 6 HT3 Sustainable Development	Year 6 HT4 Diversity & Inclusion	Year 6 HT5 Power & Justice	Year 6 HT6 Good Health & Well Being
<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That for most people the internet is an integral part of life and has many benefits How to consider the effect of their online actions on others and know how to recognize and display respectful behaviour online - including when we are anonymous. <p>1 day Programming in Scratch</p> <p>Computer Science (CS)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Program keyboard/touch screen inputs, selection (conditions), loops and random variables for unpredictability (operators). Program inputs, selection, sensing, random variables, operators for direction and data variables for scoring. Use inputs, selection, loops, sensing, costume changes and broadcasts. Work with multiple sprites to send broadcast messages between them. <p>NC Links <i>Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> The importance of keeping personal information private That people sometimes behave differently online including pretending to be someone that they are not. <p>1 day Python Programming Language And Image Editing</p> <p>Computer Science (CS) Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Use the PRINT command for text. Program a simple calculator in Python. Program loops to repeat text. Program interactive inputs. Find errors in a program (debugging) Program a trivia chatbot using 'send message' functions (challenge) <p>NC Links <i>Design, write and debug programs that accomplish specific goals; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Use a textual programming language to solve a variety of computational problems. (Key Stage 3)</i></p> <p>Know how to:</p> <ol style="list-style-type: none"> Adjust the colours, brightness and contrast to improve a photo. Create a before and after slide in presentation software. Take and crop a screenshot. Add drawing and text layers. Import new images as layers and resize them to fit. Add colour elements to a black and white image using layers and eraser tools. <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> That the internet can be a negative place where online abuse, cyberbullying and trolling and harassment can take place which can have a negative impact on mental health. Where and how to report <p>½ Day E-Safety Digital Literacy (DL)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Keep personal information private. Respect and protect against online bullies. Understand the consequences of sharing photo/videos online. Understand the term digital footprint. How can we check online content is trustworthy. How, where and who can we report concerns we have to. Use suitable usernames and passwords for online accounts. Understand the pitfalls of in-app purchases. <p>NC Links <i>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</i></p> <p>1 day Web Design Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Create a static homepage. Choose a suitable theme for your website. Change the site identity to a suitable title, tagline and website icon. Upload a suitable header and/or background image. Adjust the website sidebar and add suitable widgets. Add text and images to a page and edit them. Add multiple pages and edit the navigation, including sub-menus. Provide constructive feedback for your classmates' websites. <p>NC Links <i>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.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> Why social media, some computer games and online gaming are age restricted <p>1 day Virtual Reality</p> <p>Computer Science (CS)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Understand what virtual reality is and how it can be used to help people. Add, move and resize objects in a virtual reality environment. Animate objects for realism. Use code blocks to add movement (with grouping) and interactions (conditions). Create multiple scenes of VR environments. <p>NC Links <i>Design and create digital content to accomplish goals. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> How to be a discerning customer of information online including understanding that information is ranked, selected and targeted and how information and data is shared and used online. the rules and principles for keeping safe online, how to recognise risks, harmful content and contact, and how to report them <p>1 day Computers: Past, present and future</p> <p>Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Show awareness of how computers and digital technology helps us today. Understand how technology has changed over time and represent it as an interactive timeline. Understand the impact (positive/negative) technological changes have on society. Predict how technology will change in the future. <p>NC Links <i>Design and create digital content to accomplish goals. Use search technologies effectively and be discerning in evaluating digital content.</i></p>	<p>E-Safety Spotlight (1hr) Digital Literacy</p> <p>Know:</p> <ul style="list-style-type: none"> What sorts of boundaries are appropriate in friendships with peers and others (including in a digital context) How to respond safely and appropriately to adults they may encounter (in all contexts, including online) whom they do not know <p>1 day Graphic Design</p> <p>Computer Science (CS) Information Technology (IT)</p> <p>Know how to:</p> <ol style="list-style-type: none"> Add, adjust and fill shapes. Group shapes to improve accuracy and speed. Add and customise gradient effects. Adjust transparency/opacity for a purpose. Use a colour picker correctly. Accurately rotate shapes. <p>NC Links <i>Design and create digital content to accomplish goals.</i></p>