

Computing Curriculum

Year A - YEAR 1/2

Whole School Focus	York		Discover		Step Back In Time	
Class Focus	Homes Now and Then / Location of York		Kings and Queens / Maps to Mark Key Locations		Ice Age / Location (The Poles)	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus and Key Skills	<p><u>E-Safety</u></p> <ul style="list-style-type: none"> - I can understand what personal information is and why we keep personal information private. - I know that I should respect people online - I can identify when and where to go for help when concerned. <p><u>Chromebook and Google Skills</u></p> <ul style="list-style-type: none"> - I can log on to a chromebook using a username and password - I can hold, carry and store my chromebook safely. - I can access Google docs, drive and slides. - I can open saved files from Google Drive - I can create a folder to store work on Google drive <p><u>Mouse and Keyboard Skills</u></p> <ul style="list-style-type: none"> - I can move the mouse or trackpad and left click to select an object. - I can drag and drop with mouse or trackpad to move objects around the screen. - I can find letters or numbers on a keyboard. 	<p><u>Internet Research</u></p> <ul style="list-style-type: none"> - I understand how a web-page displays information in different ways; text, images, videos and interactive elements. - I can use a webpage to answer questions using key words <p><u>Digital Art</u></p> <ul style="list-style-type: none"> - I can change the colour of individual pixels to accurately re-create basic and detailed artwork - I can re-create graphics using pixels with different colours. 	<p><u>Introduce Programming</u></p> <ul style="list-style-type: none"> - I can create and debug simple programs - I can use logical reasoning to predict the behaviour of simple programs. - I can simplify a program by using a loop. - I can program selection/conditions (if one sprite hits another) 	<p><u>Design</u></p> <ul style="list-style-type: none"> - I can change the colour and pattern of elements. - I can position and rotate objects on a design. - I can position objects in relation to each other. - I can resize, rotate, flip and arrange objects behind/in front of each other. <p><u>Recognise uses of IT</u></p> <ul style="list-style-type: none"> - I understand computers store and follow instructions. - I can spot digital technology in school. - I can understand what makes a computer a computer. - I understand computers store and follow instructions. - I can spot digital technology in school. - I can understand how different technology helps us. 	<p><u>E-Book Creation</u></p> <ul style="list-style-type: none"> - I can add a book cover with title, author, colour and image. - I can add multiple pages based on a theme. - I can add text on different pages. - I can add images on different pages to match the theme/text. - I can add voice recordings to match the text and theme 	<p><u>Music Creation</u></p> <ul style="list-style-type: none"> - I can create a rhythm using a pattern of beats. - I can create digital sounds using patterns and shapes. - I can create a simple melody using patterns and adjust tempo. <p><u>Introduction to Data Handling</u></p> <ul style="list-style-type: none"> - I can 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.
Key Vocabulary	<p>Sharing Permission Respect Report</p> <p>Username Password Chromebook Google Drive</p> <p>Trackpad</p>	<p>Webpage Browser Pixel Colour Graphics</p>	<p>Algorithm Debug Error Inputs Outputs</p>	<p>Position Resize Rotate Arrange</p> <p>Digital technology Storing information</p>	<p>Title Author Colour Image Text</p>	<p>Beats Pattern Tempo Melody</p> <p>Data Interpret</p>

	Mouse Keyboard					
Previous	EYFS In EYFS children will begin to use iPads for taking photos and understand how to carry technology carefully around school.	EYFS In EYFS children will use the interactive whiteboard for mark making and drawing.	EYFS In EYFS children have access to BeeBots for simple programming	EYFS In EYFS children will use specific technology for a purpose eg talking tins for voice recording, battery powered objects such as torches etc	EYFS In EFYS children have access to voice recording toys	EYFS In EYFS children will use technology to play music/watch videos and listen to stories.
Year B Focus	E-Safety Chromebook and Google Skills Text and Images	Digital Art Comic Creation	Develop Programming	Programming in Scratch Junior	Introduction to Animation	
Next	Year 3/4 <u>E-Safety</u> - I can understand the importance of using avatars and how to make them. - I can describe the term 'sharing online' and why we need to get permission to share photos and videos of other people. <u>Chromebook Skills</u> - I can share my work with others - I can collaborate with others on the same document	Year 3/4 <u>Internet Research</u> - I can understand why we should not always trust what we read online and how to check - I can understand features of an Internet Browser. - I can be discerning in evaluating digital content. - I can check the internet for fake news by cross-referencing facts. <u>Digital Art</u> - I can use various lines and fill tools plus copy/paste and rotation to create pattern effects. - I can use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects. - I can use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics. - I can add, resize and organise colour or picture backgrounds.	Year 3/4 <u>Programming in Scratch</u> - I can design, write and debug programs that accomplish specific goals. (Including outputs) - I can use repetition in programs. - I can work with various forms of inputs; keyboard, mouse and touch screen. - I can write programs to simulate physical systems.	Year 3/4 <u>3D Design</u> - I can understand and use 3D space on a grid. - I can design for a purpose - I can re-create or design familiar 3D models using cubes, such as tables and chairs. - I can use chisel tool to improve and adapt models. - I can colour individual blocks or whole models. - I can resize, adjust height, duplicate and use the different perspective for 3D shapes. - I can change the transparency of bricks. <u>Inside a Computer</u> - I can understand what important parts of inside a computer or mobile device do to help with the performance (CPU, Fan,	Year 3/4 <u>E-Book Creation</u> - I can choose a suitable page shape and add a title and subtitle. - I can change the background colour/texture of a page. - I can add, resize and change the colour of a shape then copy and paste it. - I can search for and add suitable images then resize and position them. - I can create another page with a background, image, shapes and text. - I can add an audio recording of the page text. - I can use hyperlinks for navigation between the pages	Year 3/4 <u>Music Creation</u> - I can create ascending and descending scales. - I can add chords evenly across the scales. - I can add arpeggios and melodies. - I can add a steady and even rhythm. - I can use sampled sounds to create an effective mix. - I can build beats, melody (tones) and effects <u>Data Handling</u> - I can change appearance of cells in a spreadsheet (fill colour and border) then add and align text. - I can find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title.

		- I can add, resize, organise characters/objects to different panels.		Hard Drive, RAM, Graphics Card). - I can understand that memory is measured in bytes and gigabytes.		
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Year B - YEAR 1/2

Whole School Focus	York		Discover		Me, Myself and I	
Class Focus	Chocolate and Railways		Castles and Dragons		Dinosaurs	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus and Key Skills	<u>E-Safety</u> - I can understand what personal information is and why we keep personal information private. - I know that I should respect people online - I can identify when and where to go for help when concerned. <u>Chromebook and Google Skills</u> - I can log on to a chromebook using a username and password - I can hold, carry and store my chromebook safely. - I can access Google docs, drive and slides. - I can open saved files from Google Drive	<u>Digital Art</u> - I can change the colour of individual pixels to accurately re-create basic and detailed artwork - I can re-create graphics using pixels with different colours. <u>Comic Creation</u> - I can add, resize and organise colour or picture backgrounds. - I can add, resize, organise characters/object to different panels. - I can add narration using text and direct speech using speech bubbles.	<u>Develop Programming</u> - I can create and debug simple programs - I can use logical reasoning to predict the behaviour of simple programs. - I can simplify a program by using a loop. - I can program selection/conditions (if one sprite hits another)	<u>Programming in Scratch Junior</u> - I can program movements. - I can program outputs for audio or text. - I can find errors in a program. - I can program inputs.	<u>Introduction to Animation</u> - I can add a background and objects to a frame (including text) - I can copy/clone a frame and move objects to create an animation, including flipping objects. - I can create an animation with multiple objects moving simultaneously. - I can create screen-recording animation (<i>optional, requires iPad</i>). - I can create stop-motion animation with photos (<i>optional, requires iPad</i>).	.

	<ul style="list-style-type: none"> - I can create a folder to store work on Google drive <p><u>Text and Images</u></p> <ul style="list-style-type: none"> - I can change the background colour of a page. - I can add, resize and position images (pictures) on a page. - I can type and position text on a page, if possible using capital letters and punctuation. - I can label pictures with text. <ul style="list-style-type: none"> - I can use word-banks for writing sentences about pictures. 				<ul style="list-style-type: none"> - I can create animated drawings of characters by cropping photos and adjusting points of movement. 	
Key Vocabulary	Sharing Permission Respect Report Username Password Chromebook Google Drive Crop Resize Position Label Text	Webpage Browser Pixel Colour Graphics Resize Background Narration	Algorithm Debug Error Inputs Outputs	Loop Logical Reasoning	Animate Stop Motion Frames Slides	Beats Pattern Tempo Melody Data Interpret
Previous	EYFS In EYFS children will begin to use iPads for taking photos and understand how to carry technology carefully around school.	EYFS In EYFS children will use the interactive whiteboard for mark making and drawing.	EYFS In EYFS children have access to BeeBots for simple programming	EYFS In EYFS children have access to BeeBots for simple programming	EYFS In EFYS children will use the iPads to watch animated videos	EYFS
Year A Focus	E-Safety Chromebook and Google Skills Mouse and Keyboard Skills	Digital Art Internet Research	Introduce Programming	Design Recognise uses of IT	E-Book Creation	Music Creation Introduction to Data Handling
Next	Year 3/4 <u>Infographics</u> <ul style="list-style-type: none"> - I can understand what an infographic is and why we use them. - I can search for and add suitable graphic elements. - I can add and format suitable titles and text. 	Year $\frac{3}{4}$ <u>Digital Art</u> <ul style="list-style-type: none"> - I can use various lines and fill tools plus copy/paste and rotation to create pattern effects. <ul style="list-style-type: none"> - I can use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects. 	Year 3/4 <u>Programming in Scratch</u> <ul style="list-style-type: none"> - I can design, write and debug programs that accomplish specific goals. (Including outputs) <ul style="list-style-type: none"> - I can use repetition in programs. - I can work with various forms of inputs; keyboard, mouse and touch screen. - I can write programs to simulate physical systems. 	Year 3/4 <u>Animation</u> <ul style="list-style-type: none"> - I can create a stop-motion video by duplicating slides that include backgrounds and shapes. - I can create animation using transition and animation effects (morph, 		

	- I can label an image with arrows and text.	- I can use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics. - I can add, resize and organise colour or picture backgrounds. - I can add, resize, organise characters/objects to different panels.		motion paths, pulse etc), including taking and editing a screenshot. - I can animate individual elements of objects. - I can create animated GIF files by animating pixels.	
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Year A Year 3/4

Whole School Focus	York		Discover		Step Back In Time	
Class Focus	A Changing City		Japan and Stone Age		Egypt	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus and Key Skills	<u>E-Safety</u> - Understand what to do if something upsets you online. - I can describe the term 'sharing online' and why we need to get permission to share photos and videos of other people. - I can understand why people pretend to be someone else online. <u>Chromebook and Google Skills</u> - I can share my work with others - I can collaborate with others on the same document - I can use a range of digital devices to take pictures <u>Document Editing and Creation</u> - I can copy and Paste text and images. - I can find and replace words. - I can format text for a purpose. - I can add bullet points to make lists. - I can experiment with keyboard shortcuts. - I can change appearance of cells in a spreadsheet (fill colour and border) then add and align text.	<u>Internet Research</u> - I can understand why we should not always trust what we read online and how to check - I can use search technologies to find specific pieces of information. - I can use search filters on websites to find suitable information. <u>Comic Creation</u> - I can add, resize and organise colour or picture backgrounds. - I can add, resize, organise characters/objects to different panels. - I can add narration using text and direct speech using speech bubbles. - I can save comic with name and title.	<u>Programming in Scratch</u> - I can design, write and debug programs that accomplish specific goals. (Including outputs) - I can use repetition in programs. - I can work with various forms of inputs; keyboard, mouse and touch screen. - I can write programs to simulate physical systems.	<u>3D Design</u> - I can understand and use 3D space on a grid. - I can design for a purpose - I can re-create or design familiar 3D models using cubes, such as tables and chairs. - I can use chisel tool to improve and adapt models. - I can colour individual blocks or whole models. - I can resize, adjust height, duplicate and use the different perspective for 3D shapes. - I can change the transparency of bricks.	<u>Infographics</u> - I can understand what an infographic is and why we use them. - I can search for and add suitable graphic elements. - I can add and format suitable titles and text. - I can label an image with arrows and text. <u>Data Handling</u> - I can change appearance of cells in a spreadsheet (fill colour and border) then add and align text. - I can find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title.	<u>Music Creation</u> - I can create ascending and descending scales. - I can add chords evenly across the scales. - I can add arpeggios and melodies. - I can add a steady and even rhythm. - I can use sampled sounds to create an effective mix. - I can build beats, melody (tones) and effects

	- I can find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title.					
Key Vocabulary	Avatar Sharing Report Collaborate Spreadsheet Cell Format	Web Address Search engine Panel Arrange Flip Narration Scale	Sequencing Repletion Variables Blocks Sprites	Duplicate Transparency Adapt Design Adjust	Infographic Text Label	Scales Rhythm Arpeggios Chords
Previous	<p>Year 1/2 <u>E-Safety</u></p> <ul style="list-style-type: none"> - I can understand what personal information is and why we keep personal information private. - I know that I should respect people online - I can identify when and where to go for help when concerned. <p><u>Chromebook and Google Skills</u></p> <ul style="list-style-type: none"> - I can log on to a chromebook using a username and password - I can hold, carry and store my chromebook safely. - I can access Google docs, drive and slides. - I can open saved files from Google Drive - I can create a folder to store work on Google drive 	<p>Year 1/2 <u>Internet Research</u></p> <ul style="list-style-type: none"> - I understand how a web-page displays information in different ways; text, images, videos and interactive elements. - I can use a webpage to answer questions using key words <p><u>Comic Creation</u></p> <ul style="list-style-type: none"> - I can add, resize and organise colour or picture backgrounds. - I can add, resize, organise characters/object to different panels. - I can add narration using text and direct speech using speech bubbles. 	<p>Year 1/2 <u>Introduce Programming</u></p> <ul style="list-style-type: none"> - I can create and debug simple programs - I can use logical reasoning to predict the behaviour of simple programs. - I can simplify a program by using a loop. - I can program selection/conditions (if one sprite hits another) 	<p>Year 1/2 <u>Design</u></p> <ul style="list-style-type: none"> - I can change the colour and pattern of elements. - I can position and rotate objects on a design. - I can position objects in relation to each other. - I can resize, rotate, flip and arrange objects behind/in front of each other. 	<p>Year 1/2 <u>Introduction to Data Handling</u></p> <ul style="list-style-type: none"> - I can 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. 	<p>Year 1/2 <u>Music Creation</u></p> <ul style="list-style-type: none"> - I can create a rhythm using a pattern of beats. - I can create digital sounds using patterns and shapes. - I can create a simple melody using patterns and adjust tempo.
Year B Focus	E-Safety Inside a Computer E-Book Creation	Digital Art	Programming in Scratch	3D Design	Video Editing Graphic Design Branching Databases	Animation

Next	<p><u>Year 5/6 E-Safety</u></p> <ul style="list-style-type: none"> - I can keep personal information private. - I can respect and protect against online bullies. - I understand the consequences of sharing photo/videos online. - I understand the term digital footprint. - I know how to check online content is trustworthy - I know where and who we can report concerns we have to. - I can use suitable usernames and passwords for online accounts. - I understand the pitfalls of in-app purchases. 	<p><u>Year 5/6 Computer Networks and the Internet</u></p> <ul style="list-style-type: none"> - I can understand Computer Networks, Internet and Cloud Computing and how they help us. - I know what email is and how we can use it safely. - I understand how and why we collaborate online (including blogging). 	<p><u>Year 5/6 Programming in Scratch</u></p> <ul style="list-style-type: none"> - I can program inputs for control, selection (conditions) and sensing for interaction and data variables for scoring - I can program distance sensing and movement. - I can program Inputs, outputs, loops, conditions, sensing and variables. 	<p><u>Year 5/6 App Design</u></p> <ul style="list-style-type: none"> - I can adjust the slide size to mimic a phone/tablet size. - I can add text and images to a slide. - I can add icons and text to use as navigation. - I can duplicate slides to create multiple pages of the app. - I can create hyperlinks to create navigation. 	<p><u>Year 5/6 Data Handling</u></p> <ul style="list-style-type: none"> - I can select and use non-adjacent cells plus resize multiple cell widths and copy/paste cells. - I can use formulae to find totals, averages and maximum/minimum numbers. - I can find data and create a spreadsheet to suit it. - I can search a database for specific information. 	<p><u>Year 5/6 Music Creation</u></p> <ul style="list-style-type: none"> - I can layer tracks using sounds and effects. - I can create effective instrument tracks. - I can edit tracks and effectively adjust volume and add effects.
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Year B – YEAR 3/4

Whole School Focus	York		Discover		Me, Myself and I	
Class Focus	Architecture		Myths, Legends and Folk Tales		Romans	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus and Key Skills	<p><u>E-Safety</u></p> <ul style="list-style-type: none"> - Understand what to do if something upsets you online. - I can describe the term 'sharing online' and why we need to get permission to share photos and videos of other people. - I can understand why people pretend to be someone else online. <p><u>Inside a Computer</u></p> <ul style="list-style-type: none"> - I can understand what important parts of inside a computer or mobile device do to help with the performance (CPU, Fan, Hard Drive, RAM, Graphics Card). 	<p><u>Digital Art</u></p> <ul style="list-style-type: none"> - I can use various lines and fill tools plus copy/paste and rotation to create pattern effects. - I can use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects. - I can use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics. - I can add, resize and organise colour or picture backgrounds. - I can add, resize, organise characters/objects to different panels. 	<p><u>Programming in Scratch</u></p> <ul style="list-style-type: none"> - I can design, write and debug programs that accomplish specific goals. (Including outputs) - I can use repetition in programs. - I can work with various forms of inputs; keyboard, mouse and touch screen. - I can write programs to simulate physical systems. 	<p><u>3D Design</u></p> <ul style="list-style-type: none"> - I can understand and use 3D space on a grid. - I can design for a purpose - I can re-create or design familiar 3D models using cubes, such as tables and chairs. - I can use chisel tool to improve and adapt models. - I can colour individual blocks or whole models. - I can resize, adjust height, duplicate and use the different perspective for 3D shapes. - I can change the transparency of bricks. 	<p><u>Video Editing</u></p> <ul style="list-style-type: none"> - I can add scene images. - I can add scripted voiceover audio, adjust the volume and crop clips (including splitting a clip). - I can add more clips and use transition effects. - I can use elements such as shapes. - I can add music background music and adjust the volume. - I can export a project. <p><u>Graphic Design</u></p> <ul style="list-style-type: none"> - I can create an icon using different shapes and fill tools. 	<p><u>Animation</u></p> <ul style="list-style-type: none"> - I can create a stop-motion video by duplicating slides that include backgrounds and shapes. - I can create animation using transition and animation effects (morph, motion paths, pulse etc), including taking and editing a screenshot. - I can animate individual elements of objects. - I can create animated GIF files by animating pixels.

	<p>- I can understand that memory is measured in bytes and gigabytes.</p> <p><u>E-Book Creation</u></p> <ul style="list-style-type: none"> - I can choose a suitable page shape and add a title and subtitle. - I can change the background colour/texture of a page. - I can add, resize and change the colour of a shape then copy and paste it. <ul style="list-style-type: none"> - I can search for and add suitable images then resize and position them. - I can create another page with a background, image, shapes and text. - I can add an audio recording of the page text, including hiding it behind an object. <ul style="list-style-type: none"> - I can use hyperlinks for navigation between the pages. 				<ul style="list-style-type: none"> - I can combine shapes and lines, then arrange them in front/behind each other. <ul style="list-style-type: none"> - I can combine shapes, colour and text to re-create an icon. - I can change the colour, size and style of text to match an icon, then arrange images and use masking and opacity tools. <p><u>Branching Databases</u></p> <ul style="list-style-type: none"> - I can add and label objects within a branching database. - I can ask questions to sort (classify) objects. 	
Key Vocabulary	Avatar Sharing Report Hard Drive RAM Bytes Gigabytes Hyperlink Stamps Copy Paste	Fill tool Copy Paste Resize Background Panels Symmetry	Sequencing Repletion Variables Blocks Sprites	Duplicate Transparency Adapt Design Adjust	Export Voiceover Volume Format Audio Icon Fill tool Arrange Opacity	Edit Motion path Background Transition Frames Duplicate
Previous	Year 1/2 <u>Recognise uses of IT</u> <ul style="list-style-type: none"> - I understand computers store and follow instructions. - I can spot digital technology in school. - I can understand what makes a computer a computer. - I understand computers store and follow instructions. - I can spot digital technology in school. 	Year 1/2 <u>Digital Art</u> <ul style="list-style-type: none"> - I can change the colour of individual pixels to accurately re-create basic and detailed artwork - I can re-create graphics using pixels with different colours. 	Year 1/2 <u>Develop Programming</u> <ul style="list-style-type: none"> - I can create and debug simple programs <ul style="list-style-type: none"> - I can use logical reasoning to predict the behaviour of simple programs. - I can simplify a program by using a loop. <ul style="list-style-type: none"> - I can program selection/conditions (if one sprite hits another) 	Year 1/2 <u>Design</u> <ul style="list-style-type: none"> - I can change the colour and pattern of elements. - I can position and rotate objects on a design. - I can position objects in relation to each other. - I can resize, rotate, flip and arrange objects behind/in front of each other. 	Year 1/2 <u>Introduction to Data Handling</u> <ul style="list-style-type: none"> - I can 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. 	Year 1/2 <u>Introduction to Animation</u> <ul style="list-style-type: none"> - I can add a background and objects to a frame (including text) - I can copy/clone a frame and move objects to create an animation, including flipping objects. - I can create an animation with multiple objects moving simultaneously.

	<ul style="list-style-type: none"> - I can understand how different technology helps us. <p><u>E-Book Creation</u></p> <ul style="list-style-type: none"> - I can add a book cover with title, author, colour and image. - I can add multiple pages based on a theme. - I can add text on different pages. - I can add images on different pages to match the theme/text. - I can add voice recordings to match the text and theme 				<ul style="list-style-type: none"> - Use software to create a bar chart/pie chart/line chart suitable for the data. - Interpret a pictogram/bar chart/line chart. 	<ul style="list-style-type: none"> - I can create screen-recording animation (optional, requires iPad). - I can create stop-motion animation with photos (optional, requires iPad). - I can create animated drawings of characters by cropping photos and adjusting points of movement.
Year A Focus	<p>E-Safety</p> <p>Chromebook and Google Skills</p> <p>Document Editing and Creation</p>	<p>Internet Research</p> <p>Comic Creation</p>	Programming in Scratch	3D Design	<p>Infographics</p> <p>Data Handling</p>	Music Creation
Next		<p>Year 5/6</p> <p><u>Graphic Design</u></p> <ul style="list-style-type: none"> - I can adjust the colours, brightness and contrast to improve a photo. - I can create a before and after slide in presentation software. - I can take and crop a screenshot. - I can add drawing and text layers. - I can import new images as layers and resize them to fit. 	<p>Year 5/6</p> <p><u>Programming in Scratch</u></p> <ul style="list-style-type: none"> - I can program list variables that chooses randomly. -I can work with multiple sprites to send broadcast messages between them - I can program a loop - I can use co-ordinates in Logo turtle. - I can write text-based commands to program digital art. - I can write text commands/functions to program keyboard inputs in a game 	<p>Year 5/6</p> <p><u>Web Design</u></p> <ul style="list-style-type: none"> - I can create a static homepage. - I can choose a suitable theme for your website. - I can change the site identity to a suitable title, tagline and website icon. - I can upload a suitable header and/or background image. - I can adjust the website sidebar and add suitable widgets. - I can add text and images to a page and edit them. - I can add multiple pages and edit the navigation, including sub-menus. - I can provide constructive feedback for your classmates' websites. 	<p>Year 5/6</p> <p><u>Data Detectives</u></p> <ul style="list-style-type: none"> - I can use comprehension skills to find clues that match the column headings of a spreadsheet. - I can use spreadsheet tools (filters and conditional formatting) to find the specific data to match the clues. - I can use Google sheets, drawing and sights 	<p>Year 5/6</p> <p><u>Virtual Reality</u></p> <ul style="list-style-type: none"> - I can understand what virtual reality is and how it can be used to help people. - I can add, move and resize objects in a virtual reality environment. - I can animate objects for realism. - I can use code blocks to add movement (with grouping) and interactions (conditions). - I can create multiple scenes of VR environments.

Year A – YEAR 5/6

Whole School Focus	York	Discover	Step Back In Time
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Class Focus	WW1 Then and Now		Titanic		Myans	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus and Key Skills	<p><u>E-Safety</u></p> <ul style="list-style-type: none"> - I can keep personal information private. - I can respect and protect against online bullies. - I understand the consequences of sharing photo/videos online. - I understand the term digital footprint. - I know how to check online content is trustworthy - I know where and who we can report concerns we have to. - I can use suitable usernames and passwords for online accounts. - I understand the pitfalls of in-app purchases. <p><u>Data Handling</u></p> <ul style="list-style-type: none"> - I can select and use non-adjacent cells plus resize multiple cell widths and copy/paste cells. - I can use formulae to find totals, averages and maximum/minimum numbers. - I can find data and create a spreadsheet to suit it. - I can search a database for specific information. 	<p><u>Computer Networks and the Internet</u></p> <ul style="list-style-type: none"> - I can understand Computer Networks, Internet and Cloud Computing and how they help us. - I know what email is and how we can use it safely. - I understand how and why we collaborate online (including blogging). <p><u>Image Editing</u></p> <ul style="list-style-type: none"> - I can adjust the colours, brightness and contrast to improve a photo. - I can create a before and after slide in presentation software. - I can take and crop a screenshot. - I can add drawing and text layers. - I can import new images as layers and resize them to fit. - I can add colour elements to a black and white photo using layers and eraser tools. 	<p><u>Programming in Scratch</u></p> <ul style="list-style-type: none"> - I can program inputs for control, selection (conditions) and sensing for interaction and data variables for scoring - I can program distance sensing and movement. - I can program Inputs, outputs, loops, conditions, sensing and variables. 	<p><u>App Design</u></p> <ul style="list-style-type: none"> - I can adjust the slide size to mimic a phone/tablet size. - I can add text and images to a slide. - I can add icons and text to use as navigation. - I can duplicate slides to create multiple pages of the app. - I can create hyperlinks to create navigation. 	<p><u>Virtual Reality</u></p> <ul style="list-style-type: none"> - I can understand what virtual reality is and how it can be used to help people. - I can add, move and resize objects in a virtual reality environment. - I can animate objects for realism. - I can use code blocks to add movement (with grouping) and interactions (conditions). - I can create multiple scenes of VR environments. 	<p><u>Music Creation</u></p> <ul style="list-style-type: none"> - I can layer tracks using sounds and effects. - I can create effective instrument tracks. - I can edit tracks and effectively adjust volume and add effects.
Key Vocabulary	<p>Personal information Report Usernames Passwords</p> <p>Formulae Averages</p>	<p>Sever Wireless Access Point Router Firewall IP Address Cloud</p>	<p>Broadcasting Sensing Operators</p>	<p>Icons Hyperlink Navigate</p>	<p>VR Environment Grouping Interaction Scene</p>	<p>Bars Effects Layers Volume</p>
Previous	<p>Year 3/4 <u>E-Safety</u></p> <ul style="list-style-type: none"> - Understand what to do if something upsets you online. - I can describe the term 'sharing online' and why we need to get 	<p>Year 3/4 <u>Inside a Computer</u></p> <ul style="list-style-type: none"> - I can understand what important parts of inside a computer or mobile device do to help with the performance (CPU, 	<p>Year 3/4 <u>Programming in Scratch</u></p> <ul style="list-style-type: none"> - I can design, write and debug programs that accomplish specific goals. (Including outputs) 	<p>Year 3/4 <u>3D Design</u></p> <ul style="list-style-type: none"> - I can understand and use 3D space on a grid. - I can design for a purpose - I can re-create or design familiar 3D models using 	<p>Year 3/4 <u>Animation</u></p> <ul style="list-style-type: none"> - I can create a stop-motion video by duplicating slides that include backgrounds and shapes. 	<p>Year 3/4 <u>Music Creation</u></p> <ul style="list-style-type: none"> - I can create ascending and descending scales. - I can add chords evenly across the scales.

	<p>permission to share photos and videos of other people.</p> <ul style="list-style-type: none"> - I can understand why people pretend to be someone else online. <p><u>Data Handling</u></p> <ul style="list-style-type: none"> - I can change appearance of cells in a spreadsheet (fill colour and border) then add and align text. - I can find and add data to a spreadsheet, resize cells and use the software to create a suitable chart with a title. 	<p>Fan, Hard Drive, RAM, Graphics Card).</p> <ul style="list-style-type: none"> - I can understand that memory is measured in bytes and gigabytes. <p><u>Graphic Design</u></p> <ul style="list-style-type: none"> - I can create an icon using different shapes and fill tools. - I can combine shapes and lines, then arrange them in front/behind each other. - I can combine shapes, colour and text to re-create an icon. - I can change the colour, size and style of text to match an icon, then arrange images and use masking and opacity tools. 	<ul style="list-style-type: none"> - I can use repetition in programs. - I can work with various forms of inputs; keyboard, mouse and touch screen. - I can write programs to simulate physical systems. 	<p>cubes, such as tables and chairs.</p> <ul style="list-style-type: none"> - I can use chisel tool to improve and adapt models. - I can colour individual blocks or whole models. - I can resize, adjust height, duplicate and use the different perspective for 3D shapes. - I can change the transparency of bricks. 	<ul style="list-style-type: none"> - I can create animation using transition and animation effects (morph, motion paths, pulse etc), including taking and editing a screenshot. - I can animate individual elements of objects. - I can create animated GIF files by animating pixels. 	<ul style="list-style-type: none"> - I can add arpeggios and melodies. - I can add a steady and even rhythm. - I can use sampled sounds to create an effective mix. - I can build beats, melody (tones) and effects
Year B Focus	E-Safety HTML	Web Design	Programming in Scratch	Binary Code Text Based Programming	Graphic Design Physical Devices	Data Detectives
Next						

Year B – YEAR 5/6

Whole School Focus	York		Discover		Step Back In Time	
Class Focus	Settlements		WW2		Ancient Greece	
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Computing Focus and Key Skills	<p><u>E-Safety</u></p> <ul style="list-style-type: none"> - I can keep personal information private. - I can respect and protect against online bullies. - I understand the consequences of sharing photo/videos online. - I understand the term digital footprint. 	<p><u>Web Design</u></p> <ul style="list-style-type: none"> - I can create a static homepage. - I can choose a suitable theme for your website. - I can change the site identity to a suitable title, tagline and website icon. - I can upload a suitable header and/or background image. 	<p><u>Programming in Scratch</u></p> <ul style="list-style-type: none"> - I can program list variables that chooses randomly. - I can work with multiple sprites to send broadcast messages between them - I can program a loop - I can use co-ordinates in Logo turtle. 	<p><u>Binary Code</u></p> <ul style="list-style-type: none"> - I can understand why computers/electronics use binary. - I can catch a sequence of binary code to create digital art. - I can convert binary code to denary numbers 	<p><u>Graphic Design</u></p> <ul style="list-style-type: none"> - I can adjust the colours, brightness and contrast to improve a photo. - I can create a before and after slide in presentation software. - I can take and crop a screenshot. 	<p><u>Data Detectives</u></p> <ul style="list-style-type: none"> - I can use comprehension skills to find clues that match the column headings of a spreadsheet. - I can use spreadsheet tools (filters and conditional formatting) to find the specific data to match the clues.

	<ul style="list-style-type: none"> - I know how to check online content is trustworthy - I know where and who we can report concerns we have to. - I can use suitable usernames and passwords for online accounts. - I understand the pitfalls of in-app purchases. <p style="text-align: center;"><u>HTML</u></p> <ul style="list-style-type: none"> - I can add and align text and change colour. - I can program background colour. - I can add and align images. - I can add hyperlinks to other websites. - I can add an iframe (such as a Google Map) and adjust the height and width. 	<ul style="list-style-type: none"> - I can adjust the website sidebar and add suitable widgets. - I can add text and images to a page and edit them. - I can add multiple pages and edit the navigation, including sub-menus. - I can provide constructive feedback for your classmates' websites. 	<ul style="list-style-type: none"> - I can write text-based commands to program digital art. - I can write text commands/functions to program keyboard inputs in a game. 	<p>(decimal numbers) and visa versa.</p> <p><u>Text Based Programming</u></p> <ul style="list-style-type: none"> - I can change the variables of text based commands. - I can write text-based commands to program digital art. - I can write text commands/functions to program keyboard inputs in a game. - I can use Turtle Logo to program a loop 	<ul style="list-style-type: none"> - I can add drawing and text layers. - I can import new images as layers and resize them to fit. <p style="text-align: center;"><u>Physical Devices</u></p> <ul style="list-style-type: none"> - I understand that computers use physical inputs and outputs and give examples. - I can program physical inputs, outputs (e.g program LED lights), loops and random variables (Microbit activities). - I can design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems. 	<ul style="list-style-type: none"> - I can use Google sheets, drawing and sights
Key Vocabulary	Personal information Report Usernames Passwords Hyperlink iframe	Static Homepage Header Edit Navigate Menus	Sequencing Repletion Variables Blocks Sprites	Binary Denary numbers Translate Loop Variables Commands Functions	Crop Screenshot Layers Edit Microbit Output Input Processor Accelerometer	Databases Spreadsheet Headings Formatting
Previous	Year 3/4 <u>E-Safety</u> <ul style="list-style-type: none"> - Understand what to do if something upsets you online. - I can describe the term 'sharing online' and why we need to get permission to share photos and videos of other people. - I can understand why people pretend to be someone else online. 	Year $\frac{3}{4}$ <u>3D Design</u> <ul style="list-style-type: none"> - I can understand and use 3D space on a grid. - I can design for a purpose - I can re-create or design familiar 3D models using cubes, such as tables and chairs. - I can use chisel tool to improve and adapt models. - I can colour individual blocks or whole models. - I can resize, adjust height, duplicate and use the different perspective for 3D shapes. - I can change the transparency of bricks. 	Year 3/4 <u>Programming in Scratch</u> <ul style="list-style-type: none"> - I can design, write and debug programs that accomplish specific goals. (Including outputs) - I can use repetition in programs. - I can work with various forms of inputs; keyboard, mouse and touch screen. - I can write programs to simulate physical systems. 	Year 3/4	Year $\frac{3}{4}$ <u>Digital Art</u> <ul style="list-style-type: none"> - I can use various lines and fill tools plus copy/paste and rotation to create pattern effects. - I can use shapes, fill, copy/paste, zoom and flip to create reflective symmetry effects. - I can use stamps, copy/paste, layers and multiple frames to create animated GIF computer game graphics. 	Year 3/4 <u>Branching Databases</u> <ul style="list-style-type: none"> - I can add and label objects within a branching database. - I can ask questions to sort (classify) objects.

					<ul style="list-style-type: none"> - I can add, resize and organise colour or picture backgrounds. - I can add, resize, organise characters/objects to different panels. 	
Year A Focus	<p>E-Safety</p> <p>Data Handling</p>	<p>Computer Networks and the Internet</p> <p>Image Editing</p>	Programming in Scratch	App Design	Virtual Reality	Music Creation
Next						