Long Term Plan: 2022 – 2023: Computing

Year band	Autumn Term		Spring Term		Summer Term	
Reception	Me and My Community **Autumn Term Outcomes**	People who help us/Autumn **Autumn Term Outcomes**	Once Upon a Time **Spring Term Outcomes**	Ready, Steady, Grow **Spring Term Outcomes**	Animal Safari **Summer Term Outcomes**	On the Beach **Summer Term Outcomes**
Year 1	<u>Programming Toys Beebots</u> • I can create instructions using pictures. • I can say why it is important to be precise when writing an algorithm. • I can write instructions to program a person like a computer. • I can program a Bee-Bot (or similar programmable toy) to move. • I can debug a Bee-Bot (or similar programmable toy). • I can program a sequence to make a Bee-Bot (or similar programmable toy) move. • To create, name and date my digital creative work.		<u>Computer Painting</u> • I can paint with different colours. • I can paint with different brushes. • I can create shapes and fill areas. • I can make changes to improve my work. • I can add text to a painting. • I can use a computer program to make a poster. • To understand how to communicate safely online.		<u>Programming Scratch Junior</u> • I can describe and use instructions to program a character. • I can program a character to grow and shrink. • I can use instructions to make characters move at different speeds and distance. • I can use a repeat instruction to make a sequence of instructions run more than once. • I can create programs that play a recorded sound. • I can create programs with a sequence of linked instructions. • To explore how to use email to safely communicate.	

	Computer Skills	Word Processing	Using and Applying
	• I can use a computer mouse. or • I can use a trackpad. • I can switch on and shutdown a computer. • I can launch an application and manipulate windows. • I can save a file. • I can drag objects. • I can identify and practise my computer skills. • To safely search for images online.	• I can type on a keyboard. • I can type symbols and save files. • I can edit text. • I can use a keyboard. • I can select and format text. • I can format the font. • To understand what personal information I need to keep safe.	• I can demonstrate a range of basic skills to use a computer and its software. • I can type and format text, then save my work. • I can open saved work and edit text. • I can use shapes to create a particular image. • I can use different brush tools to create a particular image. • I can create text and pictures about a shared theme. • To apply my online safety knowledge to help others make good choices online.
Year 2	**Computer Art** • I can create computer art. • I can use a range of tools in a computer program to reproduce a style of art.	**Using the Internet** • I can search the Internet using one word. I can stay safe when using the Internet.	**Presentation Skills** • I can use basic computer skills. I can use folder. • I can organise ideas for a presentation. • I can create a simple presentation with text.

• I can make and edit shapes to create a piece of art. • I can change the shade of a colour for effect. • I can retrieve a file to edit in a computer program. • I can use a range of skills to create a piece of art. • To understand that the information I put online leaves a digital footprint.	• I can search the Internet to find results suitable for children. **I can search for information safely online.** • I can follow links to another web page. **I can follow links safely online.** I can create content for an online blog. **I can use a camera to take safe photos to use online.** • I can create content for an online blog. **I can use an online blog safely and respectfully.** • I can post positive comments and responses on a blog. • To recognise whether a website is appropriate for children.	• I can add and format an image. • I can reorder slides and present a presentation. • I can search and print. • To be able to identify kind and unkind behaviour online.
Preparing for Turtle Logo • I can give and follow an algorithm to turn right or left. • I can give and follow an algorithm to make half and quarter turns. • I can give and follow an algorithm using the commands right 90 and left 90. • I can give, follow and complete an algorithm. • I can use recognised language in an algorithm. • I can create, test and debug an algorithm. • To use keywords in an online search to find out about a topic.	**Programming Turtle, Logo and Scratch** • I can create an algorithm to move or rotate the Turtle. • I can create an algorithm and use the repeat Command. • I can create an algorithm and add sound. • I can create an algorithm and use the repeat and say command. • I can create an algorithm and use the green flag to start.	**Using and Applying** • I can use a specific computer skill to reproduce a style of art. • I can use a specific computer skill to create and compare styles of art. • I can create a presentation including text and images. • I can retrieve, edit and organise a presentation. • I can create precise instructions for a character on a particular theme. • I can create code for a pair of characters involving speech and movement.

		• I can create an algorithm and use the commands to change the backdrop and add sprites. • To rate and review informative websites.	• To apply our knowledge of safe and sensible online activities to different situations.
Year 3	**Internet Research and Communication** • I can identify how word order affects search results. • I can explain how searches return results. • I can save and share webpages. • I can identify the ways, and investigate how, we communicate online. • I can explain how to stay safe when communicating online. • I can explain why I need to be responsible online. • To know what cyberbullying is and how to address it.	**Drawing and Desktop Publishing** • I can draw with different shapes and lines. • I can order and group objects. • I can manipulate shapes and lines. • I can recognise effective layout. • I can combine text and images. • I can lay out objects effectively. • To create strong passwords and understand privacy settings.	**Programming Turtle, Logo and Scratch** • I can create and debug an algorithm using the move, rotate and repeat commands. • I can create and debug algorithms using pen up and pen down. • I can create and debug algorithms that draw regular polygons. • To create and debug algorithms that draw shapes. • To create and debug algorithms that draw regular polygons. • To create and debug algorithms to draw patterns. • To explore different ways children can communicate online.
	Word Processing • I can use basic computer skills. • I can change the case of text. • I can align text. • I can use bullets and numbering. • I can use the <ctrl> key.	**Presentation Skills** • I can plan a branching story. • I can create slide templates and organise slides with hyperlinks. • I can add theme, transitions and animation to a presentation.	**Using and Applying** I can use and combine appropriate software to design, create and present an electronic presentation.

	• I can insert and format text boxes. • To understand how websites use advertisements to promote products.	• I can use action settings. • I can insert audio and video. • I can evaluate slide layout and make improvements. • To safely send and receive emails.	To be completed over a series of lesson- big question: Can you create an informative presentation about your school? • To use knowledge about online safety to plan a party online.
Year 4	**Word Processing** • I can format images for a purpose. • I can use formatting tools to create an effective layout. • I can use the spellcheck tool. • I can insert and format a table in a word processing document. • I can change a page layout for a purpose. • I can create hyperlinks within a word document. • I can identify how a message can hurt someone's feelings. • I can say how I should respond to a hurtful message online.	**Turtle Logo** • I can create and debug an algorithm to create a procedure. • I can create and debug an algorithm that uses setpos to draw shapes. • I can create and debug an algorithm with different colours. • I can create and debug an algorithm to fill areas with colour. • I can create and debug an algorithm to produce text. • I can create and debug an algorithm to draw arcs. • I understand the term 'plagiarism' and how to avoid it.	**Using and Applying** I can use appropriate software to design, create and present details of a new cartoon character. To be completed over a series of lesson- big question: Can you create your own new cartoon character? Completed over the Summer term. • To explain how to be a responsible digital citizen.
	Scratch • I can compare quizzes and decompose a problem into smaller parts. I can write and debug a program.	**Animation** • I can describe early forms of animation before computers and how computers have made a Difference.	• To create an online safety superhero character.

	• I can write and debug a program. I can use sequence and selection. • I can write and debug a programs which use sequence and repetition. I can work with variables. • I can write and debug a program which uses sequence. I can work with variables. • I can write a program. • I can design, write and debug my own program by selecting appropriate visual block commands to create a sequence. • I can use a search engine accurately.	• I can create a short computer animation using one or more moving stick figures. • I can create a recorded animation involving a number of moving characters on a background. • I can structure specific timing of animations using a time slider. • I can use a camera to create a short stop motion animation film. • I can analyse and evaluate software. • To create a safe online profile.	
Year 5	<u>Controlling Devices</u> • I can draw and interpret a flowchart with the correct symbols. • I can create and edit a flowchart to control a simulated device. • I can control multiple outputs at the same time. • I can use a decision symbol based on the status of an input. • I can create a flowchart program containing a Subroutine. • I can design, write and debug my own flowchart program for a given task. • To identify spam emails and what to do with them.	<u>3D Modelling</u> • I can draw 3D shapes. • I can add detail to 3D drawings. • I can add detail to 3D drawings. • I can add and manipulate 3D models. • I can create a complex 3D model. • I can create a 3D model of my own design. • To create strong passwords.	<u>Scratch</u> • I can design and program a character game. • I can design an original character or backdrop for a game. • I can add features or effects to enhance a game. • I can create an original animated game with a specific goal. • I can program costume changes for a sprite. • I can add point-scoring and levels to game code. • To apply online safety rules to real-life scenarios.

	• To write citations for the websites I use for research.	**Using and Applying** I can research and design a new bedroom using appropriate software to create and present the plans. To be completed over a series of lesson- big question: Can you design the ultimate new bedroom for a 10-year-old? • To recognise when, why and how photographs we see online may have been edited.	**Radio Stations** • I can use software to create my own sounds by recording, editing and playing. • I can combine audio effects to create an original radio jingle. • I can research and plan digital content for a radio podcast. • I can use software to create and present digital content for a radio podcast. • I can design and record a persuasive radio advert for a product or service. • I can present and evaluate audio content. • To apply online safety rules to real-life scenarios.
Year 6	**Programming- Kodu** • I can investigate and evaluate the features of programming software. • I can program Kodu using 'When' and 'Do' Instructions. • I can use tools and add features to create an original landscape in Kodu. • I can analyse and deconstruct code to work out its purpose. • I can program a character to be controlled around a custom track to reach a goal. • I can program a character to follow an automatic path.	**Spreadsheets** • I can enter data and formulae into a spreadsheet. • I can order and present data based on calculations. • I can add, edit and calculate data. • I can use a spreadsheet to solve problems. • I can plan and calculate a spending budget. • I can design a spreadsheet for a specific purpose.	**Film Making** • I can use appropriate software and other tools effectively to write a film script. • I can locate and check appropriate digital content, and provide accurate crediting of sources. • I can use digital recording devices to film and import into video editing software. • I can plan, conduct and import video interviews as part of a short film. • I can use video editing software to create a short film. • I can use video editing software to turn a film project into a finished movie and present it.

Scratch	• I understand the benefits and pitfalls of online relationships.	Using and Applying
• I can create appropriate animations for a story scene. • I can structure and control the timing of events. • I can control when objects need to be visible. • I can sequence events to create a story narrative. • I can add voice sounds to enhance an animated story. • I can add interactive user features to a scene or story. • I can find similarities and differences between in-person and cyberbullying. • I can identify good strategies to deal with cyberbullying. • I can identify secure websites by identifying privacy seals of approval.	• I can identify information that I should never share. • I can identify how the media play a powerful role in shaping ideas about girls and boys.	I can design a new game, using appropriate software to present information and advertise a product launch. To be completed over a series of lesson- big question: Can you design and plan the launch of a new game or app? • I can apply my online safety knowledge to my online activities. • I can use my knowledge of online safety to create a multiple-choice quiz.