Computing Year 2

	Term 1	Term 2	Term 3	
Unit of work	Navigating the Web and Staying Safe online	Writing Algorithms	Beginning Desktop Publishing (3 lessons)	Programming Probots (3 lesson)
Link to Programme of study	**Digital Literacy – inc. online safety**	**Computer Science**	**Digital Literacy – inc. online safety**	**Computer Science**
Composite knowledge	A web browser is a program for looking at Web pages The World Wide Web is made up of lots of web pages all full of information You can find web pages by using a search engine Web pages are navigated using menus You should keep your personal information safe when online	Computers work by following algorithms Algorithms need to be clear and precise in order for them to be successful Algorithms are programmed into computers How to create and debug simple programs in computer code Use logical reasoning to predict the behaviour of simple programs	Software can be used to create digital artefacts Microsoft Word is a program used for creating text based documents Digital documents can be saved and retrieved from the school network Folders are a good way to organise documents Recognise the tools available to edit text	Computers work by following algorithms Algorithms need to be clear and precise in order for them to be successful How to create and debug simple programs in computer code Use logical reasoning to predict the behaviour of simple programs Recognise repeated patterns
Intentional knowledge they need to understand (Component knowledge)	How to log on to the computer Which programs are web browsers and how to use them to view web pages How to use search engines to find pages – including finding pages specifically for kids How to use menus to find information using web pages What to look out for when playing online How / who to report concerns to and how to deal with uncomfortable situations	How to write and test an algorithm using a digital device How to program the Probots Recognise the importance of clarity and precision in algorithms That the order of the steps in an algorithm is important How to convert simple algorithms into code Read and predict what code will do when run	How to plug in and use a mouse How to create folders to save work in on the network How to open and edit documents saved on the school network Delete and add text to a document	How to write and test an algorithm using a digital device How to program the Probots Recognise the importance of clarity and precision in algorithms That the order of the steps in an algorithm is important

			Type capital letters and symbols using the keyboard Save files to folders Add images to documents using Online Pictures Use Copy and Paste to move text from one place to another	How to convert simple algorithms into code Read and predict what code will do when run Write a simple repeat loop
National Curriculum KS1 (skills)	**Key stage 1** **Pupils should be taught to:** • 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 • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.			
Vocabulary	Logging on, Web Browser, Search Engine, World Wide Web, Webpage / Website, Personal information, kids	Algorithm, Instructions, Order, Debugging, Clear, Precise, Probot, Code, program	Keyboard, mouse, Documents, Folder, Microsoft Word	Algorithm, Instructions, Order, Debugging, Clear, Precise, Probot, Code, Program, Repeat
Links to prior knowledge (EYFS)	How to logon to the computer using Usernames and passwords. What counts as personal information	Writing, testing and debugging algorithms in Year 1	Logging on to the computer Year 1 opening files saved on the network	Year 2 – writing clear and precise algorithms and introduced to the Probots Writing, testing and debugging algorithms in Year 1
Key knowledge for assessment	Can navigate to a given website and use menus to move around Identify different web browsers on their devices	Can predict the outcome of simple algorithms Can write, test and debug algorithms including programming them into a controllable device	Can open, edit and with support save Word documents saved on the school network.	Can predict the outcome of simple algorithms Can write, test and debug algorithms including

	Understand who to ask for help if unsure online and what information they should keep safe	Recognises the importance of order and the need for precision and clarity	Has used a range of text editing techniques Developing mouse control required to highlight specific text and make use of right click options	programming them into a controllable device Recognises the importance of order and the need for precision and clarity Evidence of using repetition in their programming
Cross Curricular Links	RSE – Staying safe online Topic – research facts	Maths – direction language	Literacy – capital letters, full stops, sequencing and presenting written work	Maths – regular Polygons, digital numbers
Oracy & Outdoor Learning Links				