

COMPUTING YEAR A

THEMES	Computer Sciences	Information Technology	Digital Literacy
KS1	Lego Builders- Coding-summer	Pictograms- Spring Spreadsheets - Spring	Online safety -Autumn Effective Searching-Autumn Technology outside of school-Autumn
LKS2	Online Safety Touch Typing Hardware Investigators	Spreadsheets Branching Databases Graphing Powerpoints Simulations	Online safety Email
UKS2	Coding	Spreadsheets Branching Databases Word Processing Concept Maps	Online safety

YEAR B

KS1	Grouping and sorting-Autumn Maze explorers-Spring	Presenting ideas-Autumn Creating pictures-Spring Making Music Questioning-Summer Spreadsheets-Summer	Online safety-Autumn 1 Exploring purple mash-Autumn
LKS2	Logo Coding	Animation Making Music Effective Search	Online safety
UKS2	Networks Coding Text Adventures	Blogging Quizzing	Online safety

COMPUTING TIER 3 VOCABULARY

Year 1	Year 2	Year 3 - Year 4	Year 5 - Year 6
Online Safety Avatar: Icon, Login saving Grouping and Sorting criteria Pictograms pictogram: Lego Builders Algorithm, debugging Maze Explorers command Coding Algorithm, Code, Code blocks, Coding, Code view, Command, Debug\ Debugging, Execute Spreadsheets	Coding Action, Bug, Collision detection action, Debug\ Debugging, Execute, Implement, Interval. Online Safety Attachment, digital footprint , email, Filter, Search engines, Internet, Personal information, Private information, secure, Protection, Sharing, website. Spreadsheets Block graph, Cell, Column, Data, Paste, Row, Table Effective Searching Browser, Device,Digital Footprint, Domain, Internet, Network, Search Engine, URL, Web Address, Web Page, Web Site, World Wide Web Creating Pictures Clip-art,Diagonal, eCollage, Stamps, Style, Surrealism. Questioning Avatar, Data, Database, Field. Making Music Bars, Beat, Compose, Note, Tune, Repeat, Sound Effect, Soundtrack, Tempo. E-book Fact file, Mind Map, Node, Presentation.	Online Safety Appropriate/inappropriate, reliable source, reputable source, spoof, verify, vlog Touch Typing home keys Hardware Investigators Components, CPU, graphics card, Hard drive, hardware, input, motherboard, network card, output, peripherals, RAM, software Spreadsheets Advanced mode, cell address, quiz tool, snippet tool Branching Database Binary Tree, Branding database, database, debugger Graphing Axis Powerpoints Presentation, media, design, preview Simulations analysis, modelling, simulation, solution Email attachment, carbon copy CC, compose, inbox, link, communication, save to draft, trusted contact,	Online Safety: SMART, encrypt, image manipulation, avatar, creative commons licence Word Processing: formatting, copyright, creative commons, attributing, hyperlink, merge cells, distributing columns Coding: variable, algorithm, simulation, nesting, decomposition, abstraction Databases: arrange, statistics, avatar, collaborative Spreadsheets: advanced mode, formula wizard, conversion, format cell, totalling tool Concept Maps: node, connections, collaborate

COMPUTING PROGRESSION MAP + TIER 2 VOCABULARY

Category of Knowledge	Key Stage	Content
E-Safety	KS1	• To recognise common uses of information technology beyond school • To log in safely • Use technology safely and respectfully, keeping personal information private • Understand that personal information should not be shared online • To demonstrate a knowledge and understanding that work can be shared globally on the internet • To identify steps that can be taken to keep personal data and hardware secure
	LKS2	• To understand the importance of a safe password, how to keep passwords safe and the consequences of sharing passwords • To fact-check information found on line and consider its reliability • To learn how to use email safely • Know a range of ways of reporting inappropriate content and contact and how to report it • Competently use the internet as a search tool • Understand the importance of online safety
	UKS2	• To demonstrate an understanding of the impact that sharing digital contact can have • To know how to maintain a secure password • To be aware of appropriate/inappropriate text, photographs and videos and the impact of sharing these online • To learn how to reference sources in work • To fact-check information found on line and consider its reliability • Identify the benefits and risks of devices broadcasting the location of the users device • Identify secure sites by looking for privacy seals of approval e.g. padlock icon • Have a clear idea of appropriate online behaviour and how to protect yourself and others from possible online danger • Identify positive and negative influences of technology on health and the environment • To understand how to contribute to an existing blog • To understand how and why blog posts are approved by the teacher • Demonstrate the safe and respectful use of a range of different technologies and online services • Identify what bullying and cyberbullying are and say how people should deal with cyberbullying
Coding	KS1	• To explain the meaning of an algorithm • To know that a computer programme turns an algorithm into a code • To understand the importance of unambiguous instructions • To debug a set of instructions • I can say what will happen in a program • I can provide information I need using a search engine

	LKS2	• I can make a real-life situation into an algorithm for a program • Design an algorithm, considering purpose and convert this idea to code • To debug a code • I can use repetition in my code
	UKS2	• To explain how simple algorithms work • To turn more complex, real-life problems into an algorithm for a program • To translate algorithms that contains a sequence, selection and repetition in the code • To test and debug programs using a logical method
Organising/ Presenting Data	KS1	• To understand what a spreadsheet looks like • To add clipart images to a spreadsheet • To use the 'move cell' and 'lock' tools • To use copying, cutting and pasting shortcuts • To use the totalling tool • To add and edit data in the table • To create a graph to represent data • To understand that data can be presented in data form • To use a pictogram to record the results of an experiment
	LKS2	• To add and edit data in a table layout • To describe cells using their addresses • To sort objects using closed questions • To create a branching database • To set up a graph with a given number of fields • To enter data into a graph • To understand the usefulness of graph and the type of information that can be presented
	UKS2	• To use formulae within a spreadsheet • To use the count tool to answer hypotheses • To use spreadsheets to model a real-life problem • Use a spreadsheet to investigate probability • To understand the need for visual representation • To understand the uses of a concept map • To understand how a concept map can be used to retell and present information • To learn how to search for information on a database • To contribute to a class database
Design	UKS2	• To explore the effects of moving points when designing • To design a 3D model to fit certain criteria • Refine and print the model