

	Autumn	Spring	Summer
Year A			
Торіс	1. E-safety (google interland) - 2. Coding (Espresso level 5)	<ol> <li>Spreadsheets (Purple Mash)</li> <li>Databases (purple mash)</li> </ol>	<ol> <li>3D modelling CAD (Sketch UP)</li> <li>Game creator (purple mash)</li> <li>MicroBits</li> </ol>
Relevant area of Programme of study	<ul> <li>-use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> <li>-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</li> <li>-design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>-use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to</li> </ul>	-use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content 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, including collecting, analysing, evaluating and presenting data and information	<ul> <li>-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, including collecting, analysing, evaluating and presenting data and information</li> <li>-design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts -use sequence, selection, and repetition in programs; work with variables and various forms of input</li> </ul>





	explain how some simple algorithms work and to detect and correct errors in algorithms and programs		
Vocabulary	Sequence, Timer, Variable Digital footprint, Password, PEGI rating, Phishing, Screen time, Spoof website online safety, reputable, shared image, reference, smart rules, encryption, plagiarism, bibliography, password, identify theft, citatiuons Action, algorithm, animation, app, background, boolean, bug, change, debugging, error, event, execute, inout, instructions, loop, message box, object, operator, output, pixe, pointer, program, properties, random, repeat, run, scope, selection, sequence, simulate, simulation, sprite, string, syntax, tap, value, varialbe	Average, formula, Copy and paste, charts, cells, columns, charts, spreadsheet, rows, move cell, equals tool, random tool	Animation, Computer game, Customise, evaluation, image, instructions,texture,screenshot, interactive, perspective, playability CAD, modelling, 3D, viewpoint, 2D, Net, 3d printing polygon
Concepts	E-safety and coding	Spreadsheets ad databases	CAD, 3D modelling and animation
Key Knowledge	can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation	-create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	-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, including collecting,





	can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems		analysing, evaluating and presenting data and information
Year B			
Торіс	<ol> <li>E safety (Purple mash 5.2)</li> <li>Coding (Espresso level 6)         <ul> <li>(revisiting spreadsheets due to covid)</li> </ul> </li> </ol>	<ol> <li>Spreadsheets- taught in autumn 2</li> <li>DATABASES (from spring lockdown)</li> <li>Blogging (Purple Mash)</li> </ol>	1. Networks (purple mash) 2. MicroBits
Relevant area of Programme of study	<ul> <li>-use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</li> <li>-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</li> <li>-design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> </ul>	<ul> <li>-use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</li> <li>-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, including collecting, analysing, evaluating and presenting data and information</li> <li>-understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities</li> </ul>	<ul> <li>-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</li> <li>-design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</li> <li>-use sequence, selection, and repetition in programs; work with variables and various forms of input</li> </ul>





	-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	they offer for communication and collaboration	
Vocabulary	Digital footprint, Password, PEGI rating, Phishing, Screen time, Spoof website online safety, reputable, shared image, reference, smart rules, encryption, plagiarism, bibliography, password, identify theft, citatiuons Action, algorithm, animation, app, background, boolean, bug, change, debugging, error, event, execute, inout, instructions, loop, message box, object, operator, output, pixe, pointer, program, properties, random, repeat, run, scope, selection, sequence, simulate, simulation, sprite, string, syntax, tap, value, varialbe	average, columns, advance mode, copy and paste, cells, charts, columns, equals, formula, rows, random, timer, spreadsheet, spin tool, random tool, move cell	concept map, text based adventure, debug, function, sprite,
Concepts	E safety and coding	Spreadhseets and blogging	Networks
Key Knowledge	can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation	-create a range of programs, systems and content that accomplish given goals, including collecting, analysing,	-understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities





can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems	evaluating and presenting data and information	they offer for communication and collaboration
---	---	--