Curriculum Assessment Map **Year:** 7 **Subject:** Computing

	INTENT			IMPLEMENTATION	IMPACT	
½ TERM TOPIC	TAUGHT CURRICULUM (TEACHER LED)	LEARNED CURRICULUM (STUDENT LED)	KEY SKILLS DEMONSTRATED	SUGGESTED ACTIVITIES INCLUDING EXTRA-CURRICULAR OPPORTUNITIES	SUMMATIVE ASSESSMENT TITLE/TYPE	ASSESSMENT CRITERIA
1	**My Digital World: How to be a Digital Citizen**	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact	Research techniques.	Tasks covering: Internet safety Trustworthiness Dangers	Online Booklet.	Use of digital technologies safely and responsibly. Use a variety of techniques to source information.
2	**Algorithms + Flowcharts**	Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem.	Building and making algorithms efficiently.	Creation of algorithms and flowcharts using various application software to increase IT skills.	Google Quiz Assessment. (Combination of multiple choice and short answer test)	Recognising, building and improving algorithms in flowchart and executable program form.
3	**Computer Hardware**	Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems	Ability to identify and define key components of computer systems. Ability to define what computer systems are.	Research tasks. Guess-the-component visual games.	Google Quiz Assessment. (Combination of multiple choice and short answer test)	Recognising, defining and contextualising key components within computer systems.

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4	**Algorithms + MicroBit (Physical Computing)**	Use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions.	Ability to program a MicroBit (Microcomputer) by using online software to apply in the real world.	Use of BBC MicroBit. Programming a real world micro computer to provide outputs.	Google Quiz Assessment. (Combination of multiple choice and short answer test)	Successfully creating algorithms by programming in BBC Micro Bit block based language. Programming the MicroBit to execute algorithm.
5	**Pillars of Computer Science**	understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem	Exploring and understanding key words and terminology integral to Computer Science.	Research tasks exploring key words and concepts in Computer Science.	Google Quiz Assessment. (Combination of multiple choice and short answer test)	Frayer modelling of keywords to better understand all computing concepts.
6	**Data Representation**	understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal. Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally,	Ability to recognise and convert binary and denary values in order to represent data. (Data such as numerical values, pixels and sounds)	Binary conversion games. Tasks that encode and decode hidden messages. House Competition to create pixelated GIFs.	Google Quiz Assessment. (Combination of multiple choice and short answer test)	Completion of binary and denary conversions. Encoded words/messages decoded. Level achieved on online binary challenge.

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		in the form of binary digits				

Curriculum Assessment Map **Year:** <insert here> **Subject:** <insert here>

	INTENT			IMPLEMENTATION	IMPACT	
½ TERM TOPIC	TAUGHT CURRICULUM (TEACHER LED)	LEARNED CURRICULUM (STUDENT LED)	KEY SKILLS DEMONSTRATED	SUGGESTED ACTIVITIES INCLUDING EXTRA-CURRICULAR OPPORTUNITIES	SUMMATIVE ASSESSMENT TITLE/TYPE	ASSESSMENT CRITERIA
1	**Back to the Future: Computer Scientists in History and Why They Matter**	*Wider reading opportunities* *Websites* *Blogs* *Research articles*	create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability	Research into each historic figure. Using the foundational principle relevant to the historic figure to solve computational thinking problems.	Online Google Slides document showing research found.	
2	**Networks: How we use computers to communicate**		Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems	Making physical systems communicate. (Microbits, desktops, mobiles) Connections will be showed with connectivity such as bluetooth and online games connecting class as a network. (Blooket games etc)	Google Quiz Assessment. (Combination of multiple choice and short answer test)	
3	**RoboMind: Computational Thinking and Robotics**		Undertake creative projects that involve selecting, using, and Combining multiple applications, preferably across a range of	Online programming platform. Program a digital version of a robot to undertake various tasks by executing commands.	Google Quiz Assessment. (Combination of multiple choice and short answer test)	

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			devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users			
4	**Flowol: Flowcharts and Solutions to Real World Problems**		Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem	Using algorithms to program real solutions to traffic light sequences and lighthouses using application Flowol. Applying Computational Thinking to solve problems on paper and test using Flowol.	Google Quiz Assessment. (Combination of multiple choice and short answer test)	
5	**Python Programming**		Use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that	Using concepts delivered in class to gradually build complex programs. Sequence Selection Iteration Algorithmic Thinking	Google Quiz Assessment. (Combination of multiple choice and short answer test)	

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			use procedures or functions			
6	**Digital Society: Being a Digital Citizen 2**		Create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct, and know how to report concerns	Research tasks based on how technology and Computer Science influences every aspect of modern life.	Online Google Slides document showing research found.	

Curriculum Assessment Map **Year:** 9 **Subject:** Computing (Tech carousel)

	INTENT			IMPLEMENTATION	IMPACT	
½ TERM TOPIC	TAUGHT CURRICULUM (TEACHER LED)	LEARNED CURRICULUM (STUDENT LED)	KEY SKILLS DEMONSTRATED	SUGGESTED ACTIVITIES INCLUDING EXTRA-CURRICULAR OPPORTUNITIES	SUMMATIVE ASSESSMENT TITLE/TYPE	ASSESSMENT CRITERIA
1	Connectivity Programming Physical computing	Micropython guide Pico starter Python projects	Programming Use of hardware components	Introduction to the Interactive Developer Environment, Programming activities, including code comprehension. Building a range of physical computing objects: Traffic light controller, Reaction game, Burglar alarm, Temperature gauge, Data logger. These are scaffolded, so development is gradual and developmental.	Mini project / competency-based activities Qs in a worksheet that links to the guide used throughout the course. Code comprehension Creative opportunities	-Students should design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. -Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions. -Understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming. -Understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems. (above are from here)