Year 8 Units of Work

Year 8	Autumn Term		Spring Term		Summer Term	
	Ist Half Term	**2nd Half Term**	**Ist Half Term**	**2nd Half Term**	**Ist Half Term**	**2nd Half Term**
UNIT OF WORK & TOPICS	**Skill building** (spreadsheets, DTP, Comic Life, Website design, Video and Database)	**Understanding computers** (input output, storage, CPU and memory cycle, internet, digital devide, cloud services, computational thinking, Python, Binary, elements of a computer.)	**Algoritms & Python** (Different techniques which can be used the represent sequences of instructions (aka algorithms) along with core sorting/searching algorithms.)	**ICT/Media project** (a project of the students choice. They must combine s/w they have to use all the skill they learnt in the skill building term.)		**Code controller** (creating games using block based programming languages).
CURRICULUM MAP	undertake creative projects that involve selecting, using, and combining multiple applications	use two or more programming languages	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	undertake creative projects that involve selecting, using, and combining multiple applications		design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems
	create, re-use, revise and re-purpose digital artefacts for a given audience	understand the hardware and software components that make up computer systems & design, use and evaluate computational abstractions	Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems	create, re-use, revise and re-purpose digital artefacts for a given audience		understand several key algorithms that reflect computational thinking
		understand how instructions are stored and executed within a computer system	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	understand a range of ways to use technology safely, respectfully, responsibly		understand simple Boolean logic
ASSESSMENTS	Final Products assessed agaisnt Success Criteria	On-Screen Assessment	On-Screen Assessment	Final Products assessed agaisnt Success Criteria		On-Screen Assessment Final Product assessed agaisnt Success Criteria
HOMEWORK	Literacy spellings key words. Surveys	Literacy spellings key words.	Literacy spellings key words.	Literacy spellings key words. Design of solutions.		Literacy spellings key words. Design of solutions.