Intent for the Year - Computing Year 7 Curriculum 2020-2021

In Computing, we aim to provide an inspirational experience for every student in a safe and purposeful learning environment that is relevant, exciting and reflective in order for every student to be confident in their use of technology. Computing will teach students how to become digitally literate, including a strong awareness of social media and its effects on modern life / mental wellbeing. This will help our students to stay safe within the increasing use of technology.

Implementation:

Students experience opportunities to all increase their understanding of how computers work, the changes in modern technology, as well as to focus on key areas of e-safety such as social media and how it impacts on their life. Throughout the year students will practice basic ICT skills such as word processing, simple spreadsheets and how to create a fantastic and relevant presentation to help them across all aspects of their curriculum. All students have opportunities to develop understanding of basic Computational Thinking and Computer Skills, such as basic visual programming, that are in the programme of study.

Term	Enquiry/Topic/Unit: *What is going to be taught?*	Key Outcomes: *What will students have achieved by completing this scheme of learning?*	Character Education: *How does this topic link to a sense of Self, Others and the World, in terms of Character Education?*	Assessment: *Will there be formative and/or summative testing? What role will interleaving play?*	Vocabulary: *What are the key words for this topic/unit that students must know?*	Home-Learning: *What homework will be set and why (e.g. consolidate/extend)?*
1a	i) E-safety ii) Logging on/ Setup user & google chrome areas. SMHW and e-praise. iii) Basic Word Skills iv) Questionnaire	understand a range of ways to use technology safely, including protecting their online identity and privacy. Access to cross-curricular technology. Select, use and combine a variety of software that accomplish given goals, including collecting and presenting data.	Be a responsible digital citizen- empathetic / courteous / responsible resilient in completing / learning new skills confident in approaching skills / learning	Verbal feedback – interleaved throughout KS3 H/W tasks End of year exam	Show my homework Log in Social media Safe online Word Bold Italic Centre Justify Align Questionnaire table	H/W Task – drafting letter to consolidate class / literacy skills H/W Task – questionnaire completion, collate useful data
1b	i) Basic Excel skills	Select, use and combine a variety of software that accomplish given goals.	resilient in completing / learning new skills confident in approaching skills / learning	Verbal feedback – interleaved throughout KS3 H/W tasks Bebras	Formula Cell Excel Data Algorithm Flow diagram	E-Safety booklet - consolidate being a responsible citizen online

	ii) Algorithms	understand several key algorithms that reflect computational thinking.			Decision Input Output	H/W task – create own flow chart algorithm
2a	i) Presentation software ii) Internet Searches ii) Cyberbullying iii) Operating Systems	Select, use and combine a variety of software that accomplish given goals, including collecting and presenting data. use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content understand a range of ways to use technology safely, including protecting their online identity and privacy. understand the software components that make up computer systems.	resilient in completing / learning new skills confident in approaching skills / learning Be a responsible digital citizen- empathetic / courteous	Verbal feedback – interleaved throughout KS3 H/W tasks	Hyperlink Presentation Cyber bullying Online identity internet search engine technology operating system	H/W task - drafting presentation and layout - consolidates class/literacy skills H/W task - safe online idea badge
2b	Microbit block programming skills	use 2 or more programming languages to solve a variety of computational problems To understand computational thinking	resilient in completing / learning new skills confident in approaching skills / learning	Verbal feedback – interleaved throughout KS3 H/W tasks	Programming Block Command Input Output	H/W task - teamwork idea badge Programming task
3a	Networks including protocols and hardware	understand computer networks, including the internet and the opportunities they offer for communication and collaboration understand the hardware components that make up computer systems, and how	Resilient in completing / learning new skills confident in approaching skills / learning	Verbal feedback – interleaved throughout KS3 H/W tasks	Network Topology Ring Star Bus Mesh Wi-fi Software Hardware	Muddy City Challenge H/W task - Quiz on learning

		they communicate with one another and with other systems				
3b	To look at potential careers in technology. Scratch - Game planning, design and creation using more advanced block programming skills	To consider what opportunities may be available in the future using technology. Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals. use 2 or more programming languages to solve a variety of computational problems	Curious in exploring different careers Resilient in completing / learning new skills Confident in approaching skills / learning	Verbal feedback – interleaved throughout KS3 H/W tasks End of year exam	Tech Cyber Career Program Block Command If Else Elif Forever	H/W task -Visualisation Diagram H/W task -GAme designer idea badge

Impact:

Overall understanding of how to use technology across the curriculum and how it can be used to support other subjects.

Better online presence for students with a deeper understanding of the effects of social media on their lifestyle

Be able to use computational / logical thinking to successfully program.