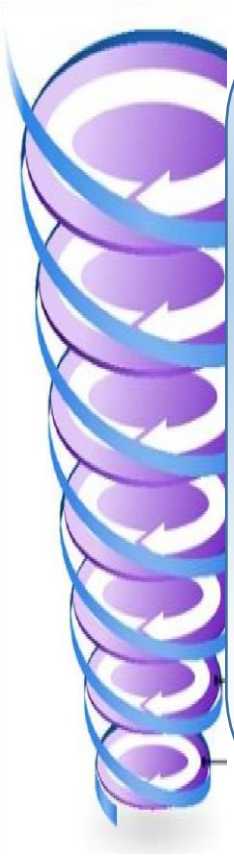# Curriculum plan: Computing

Connected

INTENT:

"I do not fear computers, I fear the lack of them"

Isaac Asimov

The use and understanding of computers gives learners the opportunity to develop sector-specific knowledge and skills in a practical learning environment. Can you solve problems? Are you a computational thinker? Do you have a scientific and mathematical way of thinking?

Computers are changing every part of our lives at an ever-increasing rate - why not drive the future?

Curriculum plan: Computing

Connected

Half term points

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
7	**Digital Organisation Introduction to Esafety** **Learning to include:** • Folder structure & Organisation • School online platforms • dangers or using email and the internet • mobile phone technology • flaming,	**Algorithms** **Learning to include:** • computational thinking to problem solve • Key concepts include: decomposition, abstraction and algorithms	**Scratch & Python Turtle** **Learning to include:** • understand scratch interface • sequence, selection and iteration • use of variables • create a program using key constructs	**Spreadsheets** **Learning to include:** • label parts spreadsheets • use of simple formulas and functions • create suitable and meaningful graphs/charts • if statements and conditional	**Digital graphics** **Learning to include:** • theory into vector and bitmap images • theory into compression and resolution • identify different image formats • photo editing skills using	**IMP & Touch Typing** **Learning to include:** • basic Word formatting techniques • advanced word formatting techniques • Use of templates • Formatting techniques in PowerPoint • Use of hyperlinks

Please click on the icons to access our online portal where you can learn more about each topic

Half term points

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	Online Safety	**Computer systems**	**Web design & HTML**	**Python programming**	**Databases**	**Computing in Society**
8	**Learning to include:** • what cyberbullying is and the different types • various types of social networks explaining the dangers of each • what grooming is and how it can occur	**Learning to include:** • input, output devices and their uses • storage devices • components of a PC introduction to binary	**Learning to include:** • purpose and component features of websites • planning of different website scenarios • learn the basic constructs of a HTML web page • build a mini website using Adobe Dreamweaver	**Learning to include:** • what Python programming is • create a basic program, which will display a message to a user • create a program, which stores information using variables • create a program, which uses both sequence and selection	**Learning to include:** • different features of a database and uses • creating a database and import data into the database • creating queries based on a set scenario • create a data input form	**Learning to include:** • Current developments in technology. • Future technology • Benefits and drawbacks of technological development • Ethical of technological development

Curriculum plan: Computing

Connected

Half term points

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
9	**iMedia in the industry**	**Systems Architecture**	**Digital Graphics**	**Interactive digital media**	**Project (controlled assessment tasks)**	**Project (controlled assessment tasks)**
	Learning to include: • Documents used to support ideas generation • Distribution platforms and media to reach audience • Properties and formats of media files	Learning to include • Understand the basics of a computer system. • Identification of computer systems in society • Discover the role of the Central processing unit • Input-processoutput	Learning to include: • Tools and techniques of imaging editing software used to create digital graphics • Purpose and Target audience of digital graphics • Client requirements and planning techniques for a digital graphic	Learning to include: • Tools and techniques of multimedia software used to create interactive multimedia product • Methods of Internet connection types • Hardware devices & Software used to connect with the internet	Learning to include: • Purpose, elements and design of visual identity • Graphic design and conventions	Learning to include: • Properties of digital graphics and use of assets • Techniques to plan visual identity and digital graphics