YEAR 7 COMPUTING CURRICULUM PROGRESSION OVERVIEW

Subject Curriculum Intent
Develop skills and understanding from KS2. Ensure that students have the opportunity to explore different branches of computing, specifically digital literacy (becoming confident and effective users of computers), computer science (becoming resilient problem solvers) and digital media (becoming skilled and imaginative content creators).

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic	eSafety	Presenting Information	Micro:Bit Programming	Micro:Bit Programming	Handling Data	Audio Editing
Core Knowledge/ **Threshold Concept**	• How to use email • Password policies • Avatars • Phishing • Malware	• Formatting tools • Consistency • Templates • Interactivity • Evaluative skills	• Block programming principles • Micro:Bit hardware • Inputs • Outputs	• Selection • Iteration • Practical problem solving • Using random number generators	• Cell referencing • Formulae • Functions • Formatting tools • Wired vs wireless networking	• Importing audio • Trimming audio • Envelope tool • Working to a brief
Why this learning now?	Critical skills for safe use of computers	Practical skills that students can apply to almost all situations	Moving beyond day-to-day practical skills to look at problem solving and logic		Providing students with knowledge and experience of practical data handling skills	Introduction of creative media as part of the subject – links to the first topic in Y8
Assessment Opportunities:	Regular assessment of practical skills throughout lessons	Regular assessment of practical skills throughout lessons Portfolio assessment against a brief	Regular assessment of practical skills throughout lessons	Regular assessment of practical skills throughout lessons Online assessment of programming knowledge and skills	Regular assessment of practical skills throughout lessons Online assessment of spreadsheet knowledge and skills	Regular assessment of practical skills throughout lessons

Learning at Home	Each unit includes: - an online quiz to check prior knowledge - an extended activity to help students reflect on what they have learned - a final online quiz to check student progress					
Key Vocabulary	- Phishing - Malware	- Formatting - Template	- Micro:Bit - Input - Output - Sensor	- Sequence - Selection	- Cell - Formula - Function	- Audio - Edit
Spiritual, Moral, Social and Cultural concepts covered	- eSafety – how to stay safe online and why people commit malicious attacks - Presenting information – how to consider audiences other than yourself - Micro:Bit programming – the impact that computing can have on real-world problems - Handling data – how computers can be used to improve efficiency and accuracy, and some of the potential side effects					
Links to careers and the world of work	- How computers are used in a variety of workplaces - How to respond to a client brief, and to design a product for an audience other than yourself - Practical problem solving techniques that apply to programming, but also to the wider world					

YEAR 8 COMPUTING CURRICULUM PROGRESSION OVERVIEW

Subject Curriculum Intent
Develop skills and understanding from Y7. Ensure that students have the opportunity to explore different branches of computing, specifically digital literacy (becoming confident and effective users of computers), computer science (becoming resilient problem solvers) and digital media (becoming skilled and imaginative content creators).

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic	Rhymes and Chimes (image editing)	Rhymes and Chimes (image editing)	Flowcharts and Python Programming	Python Programming	False News	App Design
Core Knowledge/ Threshold Concept	• Combining text, shapes and images • Selection tools • Use of layers	• Image adjustments • Layer style effects • Interpreting a client brief • Producing a complex graphic for a purpose	• Fundamental programming principles • Flowchart symbols • Python syntax • Inputs • Outputs	• Arithmetic • String handling • Selection • Iteration • Testing and debugging	• Types of false news • How to identify false news • Why people create false news	• Principles of interactive mobile app design • Importing and aligning assets • Triggers • Linking scenes
Why this learning now?	Practical creative media skills following directly from the end of Y7		Building on block-based programming skills from Y7 at this time and beginning the transition to text based coding		Building on eSafety skills from Y7	Combining creative media skills with digital literacy skills to produce a resource linked to Y6 transition
Assessment Opportunities:	Regular assessment of practical skills throughout lessons	Regular assessment of practical skills throughout lessons Portfolio assessment against a brief	Regular assessment of practical skills throughout lessons	Regular assessment of practical skills throughout lessons Online assessment of programming knowledge and skills	Regular assessment of practical skills throughout lessons Online assessment of digital literacy knowledge and skills	Regular assessment of practical skills throughout lessons

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Learning at Home	Each unit includes: • an online quiz to check prior knowledge • an extended activity to help students reflect on what they have learned • a final online quiz to check student progress					
Key Vocabulary	• Canvas • Selection • Audience	• Layer • Saturation	• Syntax • Flowchart • Decision	• Debug • Variable	• Search engine • Bias • Reliability	• Application • Augmented Reality
Spiritual, Moral, Social and Cultural concepts covered	• Image editing – how to consider audiences other than yourself • Flowcharts and python programming – the impact that computing can have on real-world problems • False news – how to spot false news and understand the motivation behind it • App design – how handheld devices and augmented reality are impacting 21st century culture					
Links to careers and the world of work	• How computers are used in a variety of workplaces • How to respond to a client brief, and to design a product for an audience other than yourself • Practical problem solving techniques that apply to programming, but also to the wider world					

YEAR 9 COMPUTING CURRICULUM PROGRESSION OVERVIEW

Subject Curriculum Intent

Develop skills and understanding from Y8. Ensure that students have the opportunity to explore different branches of computing, specifically digital literacy (becoming confident and effective users of computers), computer science (becoming resilient problem solvers) and digital media (becoming skilled and imaginative content creators). Support students in making informed decisions for GCSE options

	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic	Python Programming	Bits and PCs	Magazine (image editing)		Digital Photography	Future Tech
Core Knowledge/ Threshold Concept	• Data types • Casting • Selection • Iteration • Robust programming techniques	• Computer hardware • Processors • Storage technologies • Data handling with spreadsheets	• Creating a blank canvas • Reviewing existing products in order to identify ideas • Understanding a visual identity • Recapping image editing skills from Y8	• Use of clipping masks • Use of gradient masks • Creation of frames and out of bounds	• Understanding what makes photographs effective • Photographic vocabulary • Composition rules • Exposure settings	• Current trends in technology • Risks of technology • How to work as a team • How to present to an audience
Why this learning now?	Building on and reinforcing knowledge and skills from Y8.	Relevant knowledge and skills for those wanting to choose CS or IT at GCSE and lifelong skills for all	Reinforcing and extending knowledge and skills from Y8. Providing a strong platform for those choosing iMedia at GCSE		An alternative looks at digital media, timed for better weather	Summative unit that includes teamwork and a combination of skills learned throughout KS3
Assessment Opportunities:	Regular assessment of practical skills throughout lessons Online assessment of programming knowledge and skills	Regular assessment of practical skills throughout lessons Online assessment of digital literacy knowledge and skills	Regular assessment of practical skills throughout lessons	Regular assessment of practical skills throughout lessons Portfolio assessment against a brief	Regular assessment of practical skills throughout lessons Portfolio assessment against a brief	Regular assessment of practical skills throughout lessons

Learning at Home	Each unit includes:					
	- an online quiz to check prior knowledge - an extended activity to help students reflect on what they have learned - a final online quiz to check student progress					
Key Vocabulary	- Syntax - Selection - Iteration	- Hardware - Storage - Cell - Formula	- Layer - Context - Filter	- Gradient - Mask - Clone	- Composition - Aperture - Exposure	- Technology - Consequences - Collaboration
Spiritual, Moral, Social and Cultural concepts covered	- Python programming – the impact that computing can have on real-world problems - Bits and PCs – understanding how to make sense of computing technology in the real world - Image editing – how to consider audiences other than yourself - Image editing – understanding that not all images are genuine - Digital photography – safeguarding, privacy and legislation around capturing and sharing images - Future tech – current trends in technology and the risks and negative consequences that go along with them					
Links to careers and the world of work	- How computers are used in a variety of workplaces - How to respond to a client brief, and to design a product for an audience other than yourself - Practical problem solving techniques that apply to programming, but also to the wider world					