


YEAR 7 COMPUTER SCIENCE CURRICULUM MAP

Beths Grammar School

Term	INTENT	IMPLEMENTATION	IMPACT
	<p>Substantive Knowledge</p> <p>This is the specific, factual content for the topic, which should be connected into a careful sequence of learning.</p>	<p>Disciplinary Knowledge (Skills)</p> <p>This is the action taken within a particular topic in order to gain substantive knowledge.</p>	<p>Assessment opportunities</p> <p>What assessments will be used to measure student progress?</p> <p>Evidence of how well students have learned the intended content.</p>
<p>Autumn Term 1A Year 7</p>	<p>Intent E SAFETY</p> <ul style="list-style-type: none"> • Online dangers • How to stay safe online • Phishing • Malware • Cyberbullying • Dangers of Social media 	<p>Using an online application, pupils get to experience cyberbully and a range of activities to learn about Online Safety.</p> <p>Through class discussions pupils share ideas, experiences and methods of protecting themselves when using the internet and social media platforms.</p>	<p>Students produce leaflets to inform and educate on Online Safety.</p> <p>Class discussions / activities</p> <p>Homework</p>
<p>Autumn Term 1B Year 7</p>	<p>Intent SPREADSHEETS</p> <p>Develop a sound understanding of formulae and functions when performing a range of calculations including:</p> <ul style="list-style-type: none"> • Auto Fill • If statements • Vlook up formulas • Conditional Formatting • Using the Sum function 	<p>Students produce a quiz/teacher set task using skills taught in class that include a range of formulas</p> <p>Students understand the benefits of using spreadsheet software to complete a range of tasks set by teacher</p> <p>Students appreciate the speed and accuracy that spreadsheets offer through completing a range of activities</p>	<p>Assessment of work produced.</p> <p>Peer assessment</p> <p>Classwork</p> <p>Homework</p>
<p>Spring Term 2A Year 7</p>	<p>Intent DATA REPRESENTATION</p> <p>Basic understanding of how data is stored on a PC.</p> <ul style="list-style-type: none"> • Convert denary to 8 bit binary • Convert 8 bit binary to denary • Convert denary to hexadecimal • Convert binary to hexadecimal • Addition and subtraction of binary numbers <p>This is taught to create an understanding of how data is represented on Computers and prep for GCSE</p>	<p>Students are taught about Binary Representation of integers using 8 bit binary digits. They learn how to convert denary to binary (integers) and vice versa.</p> <p>Addition and subtraction of 8 bit binary numbers</p>	<p>Summative assessment</p> <p>Classwork</p> <p>Homework</p>
<p>Spring Term 2B</p>	<p>Intent INTRODUCTION TO PROGRAMMING / SCRATCH</p>	<p>Students create a simple game/task set by the teacher in order to gain basic skills or familiarity of the Scratch platform.</p>	<p>Teacher and peer evaluation of task produced.</p>

Year 7	Students are introduced to the concept of programming using block coding in Scratch.	Students then plan and design their own game and characters.	Peer assessment Classwork Homework
Summer Term 3A Year 7	<p>Intent INTRODUCTION TO PYTHON CODING</p> <ul style="list-style-type: none"> • Introduction to algorithms (flow charts/pseudocode) • Basic sequential programming • Use of variables • String concatenation • Introduction to IF statements • Casting 	Students develop their basic skills of Python programming. Students will create a range of simple programming tasks including input of data, simple calculations, string manipulation and casting.	Homework Classwork Assessment / Test
Summer Term 3B Year 7	<p>Intent GRAPHICS PROJECT</p> <p>Students learn about a range of different image files Students design a logo and title for their chosen graphics project using a range of graphics tools including Fireworks taking into consideration the audience and theme.</p>	Students create a mini project / cover title using a range of graphics tools including Fireworks/Paint	Assessment of task produced. Homework Classwork