

Year 8

Timing	Unit Title	Key Question	Knowledge	Assessing Understanding
Autumn Half Term 1	A - DTP	How do I produce work of professional quality?	<ul style="list-style-type: none"> Layout – Frames / Flowing / Alignment New tools – shaped frames / transparency Rules for professional layout Fine-tuning and checking work 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> Complete a task to a given specification Lay out and print an accurate, professional looking document <p>Skills</p> <ul style="list-style-type: none"> Technical DTP – transparency / shaping Visual literacy – spotting small errors and correcting them <p>Assessment point information Marks for this work will feed into an Assessment Point BM data will be collected on the accuracy of their work and their ability to spot their own mistakes</p>
	O - SSI	How do I solve problems using sequence, selection and iteration	<ul style="list-style-type: none"> Sequence – putting instructions in order Selection – choosing which instructions to execute Iteration – repeating instructions according to some condition 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> Girls’ progress is assessed during lessons An online test is used to assess girls’ understanding and give instant feedback <p>Skills</p> <ul style="list-style-type: none"> Use of block-structured language on the microbits Use of micropython on the microbits : <ul style="list-style-type: none"> Simple statements If statements For loops

				<p>Assessment point information Marks for the online test will feed into an Assessment Point, together with BM data from lessons</p>
Autumn Half	N – 3D Animation	How do I create a 3D scene and animate it	<ul style="list-style-type: none"> ● 3D editing capability ● Lighting ● Textures and surfaces ● Animation 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> ● data collection on progress in lessons ● peer reviews of each other’s final videos ● checking of a sample of marks <p>Skills</p> <ul style="list-style-type: none"> ● production of 3D scenes <p>Assessment point information Marks from the final videos will be checked and then feed into an Assessment Point BM data will be collected on their progress while working.</p>

Term 2

	Q – Cyber	What is Cyber?	<ul style="list-style-type: none"> • Ethical issues in technology • Preparation for Cyberfirst • The four key areas – Encryption, Programming, Networks and Cyber Security 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> • Progress is monitored in lessons • Onscreen puzzles allow progress check <p>Skills</p> <ul style="list-style-type: none"> • Altering code • Decrypting text • Find security flaws in websites • Using a CLI interface <p>Assessment point information The puzzle data feeds into an Assessment Point</p>
Spring Half term 1	J – SQL 2	How do I query proper databases?	<ul style="list-style-type: none"> • Basic SQL revision • The four SQL lines of a query • Relational database principles • Searching across tables 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> • Progress is monitored during lessons • Girls complete a final exercise which will test their ability in the new techniques <p>Skills</p> <ul style="list-style-type: none"> • SQL searching : <ul style="list-style-type: none"> ○ Cross-table WHERE lines ○ ORDER BY ○ Ascending and descending order <p>Assessment point information Marks for this work will feed into an Assessment Point BM data will be collected on their progress while working.</p>

	S – Coding 1	How do I write programs in pure code?	<ul style="list-style-type: none"> ● Use of Replit / Python ● Using parameters to alter program execution ● For loops and index variables ● Python syntax and layout ● Debugging 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> ● Progress is monitored in lessons ● Final test which checks their ability both to write and debug code ● Storytelling <p>Skills</p> <ul style="list-style-type: none"> ● Altering code ● Debugging and writing accurate code ● Finding out what parameters do ● Use of library instructions ● Ability to work out how to use unseen instructions by themselves <p>Assessment point information The final test feeds into an Assessment Point, as does BM data collected from these lessons.</p>
Spring Half term 2	K – Apps 3	How do I make my Apps more interesting?	<ul style="list-style-type: none"> ● Use of CSS properties to control objects ● Use of Javascript to change these properties during execution ● Production of a simple game using these facilities 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> ● Girls complete a final task which demonstrates their skills in the new areas ● Performance is monitored and data collected in lessons as they progress <p>Skills</p> <ul style="list-style-type: none"> ● Using CSS to fix initial values of page objects ● Using <i>jQuery</i> to alter these properties ● Using variables to hold values to be used in the program ● Using <i>GetVariable</i> and <i>SetVariable</i> to deal with variables

				Assessment point information This will be included in the Summer AP
Summer Half term 1	F - Modelling	How do I make my model smarter?	<ul style="list-style-type: none"> ● Revision of Y7 work : <ul style="list-style-type: none"> ○ Formulae ○ Use of SUM / Average ○ Conditional formatting ○ Named cells ● IF statements and their use 	How understanding is assessed : <ul style="list-style-type: none"> ● An assessed exercise tests their ability in new and revised areas ● Progress is regularly measured during lessons via a series of graded exercises Skills <ul style="list-style-type: none"> ● Basic modelling skills from Y7 ● Ability to use IF statements to give selected values where necessary ● Use of Conditional Formatting to make the model as easy to use as possible Assessment point information Marks for the final exercise will feed into the Summer AP, as will data from progress in lessons collected throughout the unit.
Summer Half term 2	D - Presentations	How do I present a convincing argument	<ul style="list-style-type: none"> ● Purpose of screen-based presentations ● Internet Gurus and their techniques : <ul style="list-style-type: none"> ○ Lessig ○ Takahashi ○ Godin 	How understanding is assessed : <ul style="list-style-type: none"> ● Girls present in pairs, and are assessed by their peers and the teacher

			<ul style="list-style-type: none"> • TGS Method and rules 	<p>Skills</p> <ul style="list-style-type: none"> • Standard presentations skills : <ul style="list-style-type: none"> ○ Eye contact ○ Speaking ○ Rehearsal • Technical skills – e.g. timing / obeying the rules / use of colour / consistency <p>Assessment point information Detailed feedback is given to students, which is recorded onto their target sheets.</p>
X - DIY	How do I learn how to use a new program?	<ul style="list-style-type: none"> • Specific skills for the chosen package • (this could be anything) 	<p>How understanding is assessed :</p> <ul style="list-style-type: none"> • Progress in the lesson is recorded <p>Skills</p> <ul style="list-style-type: none"> • Ability to try things out by themselves • Strategies to explore a new program • Ability to quickly assimilate knowledge and skills for a given task <p>Assessment point information BM data will be collected on their progress while working, and fed into an Assessment Point.</p>	