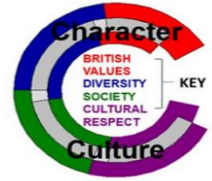


DESIGN AND TECHNOLOGY

Link - R:\Teaching\Creative (Gabor)\Tech MDH\ - CURRICULUM INTENT\Y7\3 CAD - Architecture (New 2023)

YEAR 7 – CAD Foundation Unit (KS3) = 7/8 Week rotation																			
INTENT: To play a part in developing knowledge and understanding of the Design and Technology National Curriculum. Students are to... apply CAD knowledge creating a range of products which get progressively harder and more complex over time.					The bigger picture: This scheme plays an important role within the technology curriculum as it is essentially teaching skills from the National Curriculum and preparing students for the challenges of key stage 4.												 <p>Character & Culture</p> Character and Culture is embedded within the curriculum map and coded as shown.		
					The Next Step: This unit is preparation for the Engineering Design Course at Key stage 4. It focusses predominantly on Unit R107 / R039 which is based upon designing ideas using CAD Software.														* Link to C&C
Lesson	British Values		Diversity							Society									
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Revise in 5 Task:	PURPOSE		FUNCTION		INNOVATION		KEY COMMANDS		KEY COMMANDS		INSPIRATION		JOBS		ROTATIONS				
Objective: I do, we do & you do...	2D Design – Basic Shapes 1	2D Design – Basic Shapes 2	2D Design – 3D shapes 1	2D Design – 3D Shapes 2	2D Design - Logo Design 1	3D Shapes – Logo Design 2	3D Shapes – Logo Design 3	3D Shapes – Logo Design 4	House 1	House 2	House 3	House 4	House 5	House 6	Overspill week – Catch up finish off.				
	CROSS CURRICULAR LINKS: <ul style="list-style-type: none"> Art: Within this unit students will develop their 3D drawing skills and making skills which will benefit the art curriculum. ICT: This unit will give students an understanding of how you can design in 3D using CAD/CAM 																		
	LESSON STRUCTURE: <ul style="list-style-type: none"> ALL lessons will use the whole school strategy I DO, WE DO, YOU DO ALL lessons will have a retrieval task that engages learners immediately after arrival. In practical settings this may not use a PowerPoint. All lessons will have a period of SILENT STUDY. All lessons will have Learning objectives visible. 																		
	WHAT SKILLS WILL BE DEVELOPED: <ul style="list-style-type: none"> To be able to understand, apply and create using computer aided design. 																		
	WHY WE ARE LEARNING THIS: <ul style="list-style-type: none"> To apply the use of Computer Aided Design into your designing. To create a range of your own unique designs that include detailed logos, an isometric house and a Google Sketch Up animation. 																		
	HOW TO BECOME AN EXPERT IN THIS TOPIC: <ul style="list-style-type: none"> Watch this YouTube clip to stretch yourself -Techsoft 2D Design V2: Images Skills Tutorial Read this book from Amazon - 100 CAD Exercises! Learn to design 2D and 3D Models by Practicing with these 100 CAD Exercises! Kindle Edition Practice the software 2D design and Google Sketchup in the library at lunch or after school. 																		
	Silent Study:	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E	B	M	E
	Assessment:	Baseline assessment		FAR 1								FAR 2		INPUT GRADES		End of year assessment			
	Homework:	Spelling – Definitions						Spelling – Definitions											
	Literacy: 2 for 2 3 for 3	2 for 2 and 3 for 3 – Within the unit of work teachers use educational and subject specific key literacy. Key Vocab 2D Design software, google SketchUp, dimension, vectorise, bitmap, explode, user requirements, 3 dimensions, 2 dimensions, laser cutter, plot, accuracy, precision, professional, health and safety. Key words and key pictures – Each unit of work has a handout including all key terms, words, tools and materials.																	
	Cultural Capital:	Applying CAD: Using CAD software to design projects inspired by real life architectural landmarks helps students acquire essential knowledge and skills, fostering an appreciation of their local heritage in line with cultural capital. Students have a CAD project within Year 7, 8 and 9 to introduce and embed these skills.																	
	Connected Knowledge	This is a unit designed to... prepare students for the future of design and technology at Bilton School as having CAD/CAM skills is a priority and plays a big part of the future curriculum. Following this it supports the journey into KS4 and 6th form Art and Design. Across the school this supports the Art, ICT and Business departments as these skills are transferable and are beneficial in the curriculum plan. Beyond school , the world of work is becoming more increasingly automated, and we are in an area of the country with a huge amount of engineering companies and potential future jobs. CAD/CAM is a perfect steppingstone to further education, apprenticeships, and university.																	
	IMPACT	Students measure progress using the department <u>F.A.R tracking sheets</u> which are in the <u>Assessment Booklets</u> . Teachers track the marks given using the <u>department shared mark book</u> and <u>SIMS</u> . This will show progress over time and prepare students for future learning at Bilton School.																	