



MAGHULL HIGH SCHOOL – CURRICULUM MAP

Unit: Architecture & CAD Engineering	Week 1	Week 2	Week 4-6	Week 7	Week 8	Week 9	Week 10-12
TOPIC	(Recap) CAD tutorials and practice Tinkercad tutorials (1-12)	Analysing and evaluating building plans	Project: Using CAD to create floor plans Homework – multiple choice assessment	Modify and adapt plans Create building exterior	Introduction to Fusion 360 Advantages and disadvantages of CAD Fusion 360 tutorial: Keyfob	Fusion 360 tutorial: Cube in a cube Paper clip	Creating a scaled assembly product – Lego man
Knowledge & Skills development	Understanding of Computer Aided Design and key sketching and extruding skills, developing 3D modelling skills Advantage and disadvantages of CAD Using Tinkercad and Fusion 360 Research into existing products Creating Ideas Scale and dimensions Evaluating outcomes. Understanding costings and justifying decisions.						
Assessment / Feedback Opportunities	Formative teacher assessment – verbal, Q&A Summative teacher assessment – of student powerpoint			Formative teacher assessment – verbal, Q&A Seneca learning homework - CAD		Formative teacher assessment – verbal, &A	Summative teacher assessment – of Lego man
Key Vocabulary	Tinkercad, workplane, 3D print, elevation, join, group, stereo lithography, PLA, filament, architecture, surveying, measuring, accuracy, costing, interior, exterior						
Literacy/Reading Opportunities	Booklets, PowerPoint, Following written tutorials						
Cross curricular themes	Measuring and geometry – Maths						
Personal Development (including British values, RSE, Citizenship)	Sharing resources and equipment Teamwork						
Career Opportunities	Engineer, Product designer, Architect, Surveyor, building surveyor, interior designer						

This weekly plan fits inside the Key Stage 3 & 4 Learning Journey and is supported with a class booklet. The weekly plan is based on 1 term which is approximately 18 lessons (12 weeks)