

Y9 Design & Technology					
(A)UTHENTIC	(S)ACRED	(P)ASSIONATE	(I)SPIRATIONAL	(R)ESILIENT	(E)MPATHETIC
Term 1.1	Term 1.2	Review of learning DIRT & summative 1) Self assessment 2) Teacher assessment FPO 3) End of unit test	Term 2.1	Term 2.2	Review of learning DIRT & summative 1) Peer assessment 2) Teacher assessment of Fusion ideas 3) End of unit test 4) End of year test
Biplane Project	Biplane Project		CAD CAM Project	CAD CAM Project	
Unit intent: Studentns understand the different types of hardwood, softwood and manmade board Students learn to independently manufacture a range of parts using templates Students gain an understanding of the environmental impacts of timbers on the planet	Unit intent: Students learn to assemble parts using screws: pilot hole, clearance hole, countersink drill bits Students learn about properties of materials inc, strength, toughness, hardness, malleability	Disciplinary knowledge Cutting techniques, shaping techniques, joining techniques, finishing techniques, hand tools CST Solidarity Creation and Environment Dignity of Work and Participation Careers Carpenter / Designer /	Unit intent: Introduction to CAD CAM Students are given access to Autodesk Fusion 360 (CAD software) and learn to use a range of tools Students are encouraged to be creative with Fusion, creating a range of ideas for a child's toy Students learn the difference between CAD and CAM Students can give advantages and disadvantages of using both CAD and CAM	Unit intent: Students are introduced to Techsoft (CAD software) Students learn to navigate Techsoft Students design their own product on Techsoft Designs are cut using the laser cutter (CAM) and studentns can link the two together and understand how CAM can be used for accurate parts Students manufacture their product using their CAD CAM parts	Disciplinary knowledge Designing skills, developing skills using SCAMPER, design fixation, CAD CAM CST Solidarity Creation and Environment Dignity of Work and Participation Careers CAD engineer / software engineer / QA officer