

KS Curriculum Overview (Year 9 DT)

Key Stage 3 Year 9 DT

TERM 1 TOPIC/s	*Key Skills/Subject Links	*Career links & BV
<ul style="list-style-type: none"> ▪ Health and safety recap on using the machines and the rules of the workshop. (HEALTH AND SAFETY BOOKLET To BE COMPLETED) ▪ Understanding of the Design Brief, project Design Brief being shared and analysed. ▪ Research into Existing product research, use of ACCESSFM to evaluate the work. ▪ Task analysis to identify areas that need to be researched. ▪ Material Properties- Resistance materials, range of materials explored in theory. 	<p>Subject links</p> <ul style="list-style-type: none"> - English (evaluating their own language to maximize progress. - Engineering (Health and safety) 	<p>Moral choices facing designers.</p> <p>Understanding of how products evolve according to users and designers needs.</p> <p>Researching into different design movements and the work of British inventors and designers.</p> <p>Evaluate products using the 6 R's.</p> <p>Enjoyment and learning about the world.</p> <p>Exploring diversity and the impact that symbols can have, and the importance of being aware of these when designing.</p>
TERM 2 TOPIC/s	*Key Skills/Subject Links	*Career links & BV
<ul style="list-style-type: none"> ▪ Materials testing- Primary research being carried out to explore possible materials for Clock. ▪ Manufacturing processes- Exploring a range of processes, used in the workshop and industry to promote career pathways. ▪ Scales of production- Understanding the need to mass produce and as well looking into one of production for personalised products. ▪ Product disassembly- Taking the clock mechanism apart and looking at how it works to help with final production. ▪ Initial design ideas (incorporating design movements) ▪ Modelling in card to look at the design in real life and evaluating improvements that might be needed. ▪ Peer assessment of final design, looking at questioning to help improve designs further. ▪ Producing a plan of make, allowing the students to evaluate their own project and looking at way to help quality control. 	<p>Subject links</p> <ul style="list-style-type: none"> -Art (Use of modelling techniques and technical drawing for designs) -Engineering (Problem solving skills with knowledge of manufacturing processes) -Math's (use of modelling and nets, with drawing to scale and angles) - Physics (Materials testing using a range of test that need to be measurable and the use of gravity to apply a force on the material) 	<p>Recycling standards of a range of materials, looking at the origins of the material and the carbon footprint.</p> <p>Advantages and disadvantages of recycling.</p>
TERM 3 TOPIC/s	*Key Skills/Subject Links	*Career links & BV
<ul style="list-style-type: none"> ▪ Manufacturing the clock, ▪ Understanding the importance of tool selection. ▪ Maintaining a safe working environment and being responsible for everyone's safety. ▪ Incorporating quality control checks that will improve the overall product for the user. ▪ Evaluation of the final product in theory and looking at ways that the product could be further developed to meet the specification. 	<p>Subject links</p> <ul style="list-style-type: none"> -Math's (measuring out material, use of scale and marking out different angles) 	<p>Students are encouraged to evaluate each other's work, building respect and mutual understanding of others work.</p>

TERM 4 TOPIC/s	*Key Skills/Subject Links	*Career links & BV
<p>Chocolate Mould Project Design & Manufacture using CAD/CAM and 3D printers – a range of seasonal chocolate mould</p>	<p>Designing skills Knowledge of CAD programs Knowledge of manufacture</p> <p>Food Maths</p>	<p>Product Developer</p> <p>Moral choices facing designers</p>
TERM 5 TOPIC/s	*Key Skills/Subject Links	*Career links & BV
<p>Graphic Design Packaging Project Design and create a box for high end toiletries of perfume</p>	<p>Drawing and layout skills Knowledge of paper and board</p> <p>Maths Art</p>	<p>Graphic Designer</p> <p>British designers and design movements</p>
TERM 6 TOPIC/s	*Key Skills/Subject Links	*Career links & BV
<p>Material Knowledge Looking at a variety of materials Technical drawing Using and developing a range of drawing skills</p>	<p>Technical drawing skills</p> <p>Art Maths Science</p>	<p>Graphic Designer Product Designer</p> <p>Moral choices when deciding on materials</p>