

Design Technology

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 7	<p>Health and Safety</p> <p>Storage Boxes</p> <p>Use of nets Introduction to the design process Introduction to CAD/CAM</p>	<p>Storage Boxes</p> <p>Use of hand tools to make wood joints Joining methods Evaluation and reflection</p>	<p>Alarming Cars</p> <p>Introduction to electronics Introduction to systems Consideration of the user.</p>	<p>Alarming Cars</p> <p>Use of nets Rendering Soldering</p>	<p>Tin Can Robots</p> <p>3Rs Environmental considerations Joining methods Peer evaluation</p>	<p>Electronic Carousels</p> <p>Use of mechanisms within a system.</p>
Year 8	<p>Trophies</p> <p>Revision of health and safety Use of CAD/CAM Use of templates Use of hand tools Types of timber</p>	<p>Acrylic LED Night Lights</p> <p>Electronic circuits Soldering Creating a specification Design development</p>	<p>Acrylic LED Night Lights</p> <p>Use of CAD/CAM Vacuum forming Joining plastics Pillow Case Design development</p>	<p>Pillow Case</p> <p>Joining fabric (How to sew by hand & use of a sewing machine) Transferring of images Product development</p>	<p>Salad Servers</p> <p>Ergonomics Anthropometrics Looking at existing products Researching design and designers Design development</p>	<p>Mobile Phone holder</p> <p>Types of plastics Manufacturing specification Design development Use of CAD/CAM Peer evaluation</p>
Year 9 Crest Award - Discovery	<p>Health and safety</p> <p>Revision of school safety rules Research and present information on legislation</p> <p>Mini Beasts</p> <p>Types of metal Biomimicry of insects to design own mini beast.</p>	<p>Mini Beasts</p> <p>How to drill metal Joining metals</p> <p>Floating Gardens</p> <p>Research existing products Properties of different materials</p>	<p>Floating Gardens (Discovery project)</p> <p>Team work / work in small groups Product development</p>	<p>A 'SMART' Project</p> <p>Smart materials Use of the design process (Research, design brief, specification, design development, planning, evaluation) Research and use of design movements</p>	<p>Mechanical Picture</p> <p>Pulleys Gears Cams Wood joints Use of hand tools</p>	<p>Mechanical Picture</p> <p>Design development Use of Cams to make a system</p>

<p>Year 10 AQA Unit Awards Crest Award Discovery Crest Award Bronze</p>	<p>Health and Safety Revision of school safety Revision of legislation Discussion about Health and safety in the work place.</p> <p>Stools Use of a template Types of manufactures board</p>	<p>Stools Use of the fret saw Use of the coping saw</p> <p>Joining timber</p> <p>Mosaic Wall Design development Ceramics</p>	<p>Mosaic Wall Design development</p> <p>Planning Manufacture of a mosaic Evaluation against a specification</p>	<p>Aprons 6Rs Joining fabric (hand sewing and use of the sewing machine) Use of the embroidery machine (CAM) Product development for the user.</p>	<p>Crest Awards Independent or small team projects on a design brief of the student's own choice. Use of the design process to for fill the brief.</p>	<p>Crest Awards Continuation of projects Presentation of findings and outcomes.</p>
<p>Year 11 AQA Unit Awards Crest Award Bronze Crest Award Silver</p>	<p>Workshop safety and independence Revision of health and safety in the workshop</p> <p>Following a set of given instructions</p> <p>Quality of finish / finishing techniques for woods and plastics.</p>	<p>Festive Enterprise Team work</p> <p>Product development</p> <p>Customer feedback and product selection.</p> <p>Costings</p> <p>Stock forms</p>	<p>Table Lamps Wood turning</p> <p>Using a template</p> <p>Types of timber</p> <p>Properties of timbers</p> <p>Product research and development</p> <p>Use of CAD/CAM to develop a net</p>	<p>Table Lamps Joining paper</p> <p>Soldering</p> <p>Circuits</p> <p>Dragster Racing Team work</p> <p>Gears / Gear ratios</p> <p>Following instructions</p> <p>Assist with STEM Day (MARCH)</p>	<p>Dragster Racing Product development and improvement (To develop their dragster race cars to make them faster and more reliable)</p> <p>Race day</p> <p>Crest Award (<i>Level will depend on previous achievements</i>)</p> <p>Independent or small team projects on a design brief of the student's own choice. Use of the design process to for fill the brief.</p>	<p>Crest Awards Continuation of projects Presentation of findings and outcomes.</p>