

### Key Stage 3

Subject: Design Technology (Year 7 & 8 have 1 lesson a fortnight and Year 9 have a half year carousel with Food).

### Intent

Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, students design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We aim to develop the creative, technical and practical expertise needed to perform everyday tasks confidently. To build and apply knowledge and understanding and skills in order to design and make high quality products for a wide range of users. To be able to evaluate and test their ideas and the work of others.

### Programme of study and assessment

	<b>Autumn Term</b>	<b>Spring Term</b>	<b>Summer Term</b>
<b>Year 7</b>	<ul style="list-style-type: none"><li>• Romford project on recycling.</li><li>• Health and safety</li><li>• Frog project</li><li>• To produce a toy frog that is able to hold paper.</li><li>• To produce a series of design ideas for their frog influenced by biomimicry</li><li>• To be awarded their machine license for using the machines and equipment safely</li><li>• Developing design ideas and specification</li></ul>	<ul style="list-style-type: none"><li>• Continue project-making the frog</li><li>• To be awarded their machine license for using the machines and equipment safely</li><li>• Chocolate project</li></ul>	<ul style="list-style-type: none"><li>• Pop up holiday card</li><li>• CAD 2D Design picture frame</li></ul>
<b>Assessment</b>	Practical assessment- Romford project peer assessment  Written assessment- topic on paper	Practical assessment- machine License  Written assessment- topic on boards and mouldings	Practical assessment- use of CAD  Written assessment- topic of polymers.

			Customer research.
<b>Year 8</b>	<p><b>Block Bot</b></p> <ul style="list-style-type: none"> <li>To produce a block bot that is personal to them and uses a range of skill.</li> <li>To produce an 8 point specification that is detailed and justified.</li> <li>To create a rendered, 3D design that is annotated, linking to your specification and user needs.</li> </ul>	<ul style="list-style-type: none"> <li>Maze challenge</li> </ul>	<ul style="list-style-type: none"> <li>CAD stationery project</li> <li>3D Design a pencil topper</li> </ul>
<b>Assessment</b>	<p>Practical assessment-production of product.</p> <p>Written assessment-topic of woods and components.</p>	<p>Practical assessment-quality of product produced (peer, self and teacher assessment)</p>	<p>Practical assessment-quality of product produced.</p> <p>Written assessment-quality of design and research. Plastics and CAD theory.</p>
<b>Year 9</b>	<p><b>CAD light project</b></p> <ul style="list-style-type: none"> <li>To produce a light that is personal to them</li> <li>To build on knowledge and experience in the workshop</li> <li>To create resources that can be referred to in future lessons</li> <li>To produce a key ring that is personal to them</li> </ul>	<p><b>Pewter casting</b></p> <p><b>Polymers,timbers,casting,</b></p>	<p>Repeat with new group</p>

	<ul style="list-style-type: none"> <li>• To create the file to be used on the laser cutter</li> <li>• To create resources that can be referred to in future lessons</li> </ul>		
<b>Assessment</b>	<p>Practical assessment</p> <p>Written assessment</p>	<p>Quality of product produced (self, peer and teacher assessment).</p> <p>Metals, woods and poymers.</p>	