

Subject: Design and Technology	Year: 8	Developed by: Design and Technology	Date: September 2022
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INTENT

In this year students, will build on their knowledge, understanding and skills from year 7, new topics will be introduced and some previous topics will be revisited and explored to higher levels.

Students will improve practical abilities learned in yr 7 and be introduced to new processes tools and equipment.

IMPLEMENTATION

Overview of Year – Topic	Wood	Mechanisms	CAD / CAM,	Graphics	Textiles	Electronics	Food
	<p>This unit is intended to further develop the students' practical skills in addition to introducing the use of wood and manufactured boards. Practical sessions will focus on developing skills and understanding in a range of hand and power tools with a clear emphasis on Health and Safety. Any associated Health and Safety, PPE, PPC along with skills and knowledge which will 'build' on</p>	<p>This unit is intended to develop students' understanding of Mechanisms and their uses. Employing a range of focused practical tasks and a series of directed theory sessions, students learn the uses of different mechanisms and how they can be incorporated into designs and products, using the study of different</p>	<p>This unit is intended to build on the skills and knowledge from year 7, further develop the students' computer designing skills, and increase their understanding of CAD/CAM in the design process. This will be achieved through a range of focussed practical design and realisation tasks, directed theory sessions and</p>	<p>This unit is intended to continue to develop students' concept of the design process and also to further increase the students' design skills and their understanding of graphics and related topics.</p> <p>Developing a range of practical skills (and introducing new skills) It allows the student to design and realise products using specialised tools and equipment.</p>	<p>This unit is intended to continue students' understanding of the design process, developing the students' understanding of textiles and applying this knowledge through a number of practical tasks.</p> <p>Students are introduced to new production methods and a range of new tools and equipment.</p>	<p>This unit is intended to introduce the use of electronics and electronic components into the design and realisation of products, it will involve both theoretical sessions and directed practical tasks, culminating in the realisation of an e-textile product.</p> <p>At all times students will be expected to work safely and accurately, develop their products as necessary and evaluate the outcome.</p>	<p>This unit is intended to imbed the understanding of Food and Nutrition for students, explaining the reasons for preparing healthy and nutritious meals and introducing different methods of creating a variety of meals using a wider range of equipment and ingredients This will be achieved through directed theory sessions with special focus on consideration of the Eatwell Plate. Dietary requirements of others is another</p>

	<p>from previous year 7 work</p>	<p>mechanisms, their properties and their uses in real world applications.</p> <p>At all times students will be expected to work safely and accurately, develop their products as necessary and evaluate the outcome.</p>	<p>selected CAD CAM projects. Students will design and produce products using a CNC laser cutter and a variety of other CNC machines.</p>	<p>Students carry out focused tasks which will increase their understanding of the possibilities available.</p> <p>At all times students will be expected to work safely and accurately, develop their work as necessary and evaluate the outcome.</p>	<p>At all times students will be expected to work safely and accurately, develop their products as necessary and evaluate the outcome.</p>		<p>focus and along with Religious restrictions across a number of common religious beliefs are explored. and focussed practical tasks which will result in the production of appealing and nutritious meals Students will further develop an understanding of the importance of having a balanced, nutritious, healthy diet whilst adapting recipes to suit their own, and their families' preferences.</p>
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IMPACT

Topic, Assessment, Readiness	Topic	Assessment Method	Mark Sch / Grade Boundaries	Knowledge / Skills / Understanding To be shared with students
	<p>WOOD MECHANISMS CAD / CAM TEXTILES ELECTRONICS FOOD</p>	<p>Self-assessment skill and knowledge evaluation to be carried out at beginning and end of each module</p> <p>Specific assessment points (DESIGN / MAKE / EVALUATE / TECHNICAL KNOWLEDGE) throughout module (in workbook)</p> <p>End of module exam</p> <p>FAR marking and final level assessment at end of module</p>	<p>RAG self assessment</p> <p>9 – 1 assessment</p> <p>9 – 1 assessment</p>	<p>Wood, Mechanisms & Electronics units are designed to be an introduction to these disciplines within D&T</p> <p>This will be accomplished by specific theory and focussed practical sessions</p> <p>Students will be introduced to the concepts and techniques specifically related to those subject areas</p> <p>Cad / Cam, Textiles & Food are designed to continue students' learning in those disciplines, previous knowledge will be embedded and new skills and knowledge will be introduced</p> <p>The skills and knowledge gained during each module will be reinforced in subsequent units and following years.</p>

