



# YEAR 10 2023-2024 TERM 1

'An ambitious curriculum that meets the needs of all'



## Medium Term Planning - Topic: R039 TA3 - Use of computer-aided design

<b>Curriculum Intent</b>	In addition to working further on objectives from Year 9 , pupils will be taught, following National Curriculum guidelines, the following this term:
<b>Skills/Assessment Objective Links</b>	<p>To be able to:</p> <ul style="list-style-type: none"><li>understand the use of CAD and the design layout for producing drawings</li><li>identify and use simple drawing commands</li><li>understand the use of specific CAD drafting commands to produce 3D drawings</li><li>identify and use CAD drawing commands to produce more developed drawings</li><li>use more detailed CAD commands to carry out rendering to their design work</li><li>identify and use CAD to simulate a drawing</li><li>develop their use of CAD further to include the addition of detail</li><li>join CAD parts together using additional CAD commands</li></ul>
<b>Spiritual, moral, social, and cultural development</b>	<p>SMSC:</p> <p>PSHE/British Values:</p> <p>Skills Builder: Planning for make skills</p>
<b>Numeracy</b>	
<b>Literacy</b>	<p>Vocabulary Tier 2: See highlighted above</p> <p>Vocabulary Tier 3: See highlighted above</p> <p>Reading:</p> <p>Writing: use of technical tier 3 vocabulary within annotation and design specification</p> <p>Oracy: when questioned pupils are able to use technical subject specific language</p>
<b>Becoming future ready</b>	<p>Careers/Employability: manufacturing industry, Product Designer, Engineering sector</p>
<b>Adaptation</b>	Throughout this topic, quality first teaching will provide differentiation:
<b>QFT/SEND Provision</b>	<p><b>By product:</b> Use of Hodder Boost resources</p> <p><b>By resource:</b> Use of exemplar materials from OCR</p> <p><b>By Intervention:</b> by providing different levels of supervision and support</p> <p><b>By Progressive Questioning:</b> exploring pupils' understanding through interactive dialogue.</p> <p><b>By Grouping:</b> according to prior attainment, gender, social preference, preferred learning style.</p> <p><b>By Task:</b> Pupils should be involved in the identification of targets which are meaningful to them and in the selection of an appropriate task from the given range.</p> <p><b>By Offering Optional Activities:</b> In class or as homework, to extend learning.</p> <p>This QFT/SEND provision will be explicit within the lesson-by-lesson schemes of work.</p>
<b>Implementation Curriculum Delivery</b>	
<b>Learning Outcomes (Knowledge)</b>	Red denotes interleaving; aspects of knowledge covered previously in Yr8 and 9.
<b>Current learning to be developed in the future within:</b>	Skills to be developed – CAD software skills on Solidworks and 2D design

<b>Assessment</b>	Formative – Use of CAD and level of skills Summative – Final outcome of rendered drawing along with the two other TAs
<b>Impact</b>	Pupils to have knowledge and understanding of how to produce freehand sketches and communicate ideas effectively using specific techniques so that they are able to complete R039 independently.