



Subject: Design Technology Engineering Drawing

Overarching Topic:			
<p>Why is this topic being studied at this time?</p> <p>How does it fit into the wider subject curriculum?</p>	<p>Ultimate Questions: Year 9 Students will study this topic to develop their drawing skills from Year 7 and 8. They will focus on the engineering techniques which are standard across industry and be able to apply them to real products. Students will develop their skills with design communication, focusing on accuracy and planning for manufacture, including scale drawings, orthographic drawings, exploded drawings and sectional drawings.</p> <p>Joining up: This unit will build on previous skills developed, combine with some topics taught in Art and will prepare students for the demands and rigor of the GCSE course.</p>		
	Critical	Core	Pinnacle
<p>The Big Questions (What questions will students be able to answer upon mastery of the topic?)</p>	<p>I can use isometric drawing but require assistance.</p> <p>Limited use of ruler and layout equipment. Construction lines heavy and no use of fine liners.</p> <p>Limited refinement of drawings.</p> <p>Some understanding of the conventions and use of 30 degree angles but some confusion evident.</p> <p>Some accuracy in places, limited clarity and difficult for a third party to understand.</p>	<p>I can use the isometric technique with minimal assistance.</p> <p>I can use construction lines and parallel lines efficiently to ensure my three dimensional sketching is high quality and accurate.</p> <p>I am able to enhance my sketching through the consideration of line weighting.</p> <p>I can add some additional detail such as dimensions and hidden details where appropriate.</p> <p>My drawings are clearly laid out and understandable to a third party.</p>	<p>I can produce isometric drawings with a high level of precision and skill.</p> <p>I am extremely proficient with the use of construction lines and parallel lines.</p> <p>I demonstrate a very high degree of accuracy to ensure the highest level of quality within my drawings.</p> <p>I am able to enhance my sketching through the utilisation of emboldened outlines and the consideration of line weighting.</p> <p>I can show my comprehensive understanding of dimensional perspective by ensuring my sketching only shows the relevant projections, faces and intricate details.</p>

The Key Skills/ Techniques	The sophistication and application of skills will become more advanced as students' progress through the critical, core and pinnacle knowledge.	
	Skill/Technique	How will this skill be developed?
	Knowledge and understanding	Powerful knowledge will be developed through the imbedding of key facts and ideas
	Impact and Influence	Applying key ideas to real life and hypothetic examples
	Source of Authority	Recall, analyse and apply key sources of authority and wisdom
	Specialist Language	Define and use in context specialist, academic vocabulary
	Judgement/Evaluation	Consider the strengths and weaknesses of key concepts and ideas in order to determine their value
	Opinion/Other Views	Consider and empathise with contrasting beliefs and ideas