



Subject: Design Technology

Sketching skills

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>Year 8 Students will study this topic to develop their drawing skills from Year 7. They will focus on the more advanced sketching techniques which are standard across all methods of the design industry and be able to apply them to real products. Students will develop their skills with design communication including: detailed 3D sketches, effective annotating and rendering and shading.</p> <p>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 Year 9 projects as well as the Design Technology GCSE course.</p>		
	Essential	Core	Ambitious
<p>The Big Questions (What questions will students be able to answer upon mastery of the topic?)</p>	<p>Can I sketch basic 3D shapes in Oblique Projection?</p> <p>Can I use isometric drawing but require assistance?</p> <p>Can I show limited use of ruler and layout equipment with heavy construction lines and no use of fine liners?</p> <p>Can I develop some understanding of the conventions and use of 30° angles but some confusion evident?</p> <p>Can I produce sketches with some accuracy in places, limited clarity and</p>	<p>Can I use the isometric technique with minimal assistance?</p> <p>Can I use construction lines and parallel lines efficiently to ensure my three-dimensional sketching is high quality and accurate?</p> <p>Am I able to enhance my sketching through the consideration of line weighting?</p> <p>Can I add some additional detail such as dimensions and hidden details where appropriate?</p> <p>Are my drawings are clearly laid out and understandable to a third party?</p>	<p>Can I use the isometric technique to a very high standard to accurately communicate my ideas?</p> <p>Am I extremely proficient with the use of construction lines and parallel lines?</p> <p>Can I demonstrate a very high degree of accuracy to ensure the highest level of quality within my drawings?</p> <p>Am I able to enhance my sketching through the utilisation of emboldened outlines and the consideration of line weighting?</p> <p>Can I show my comprehensive understanding of dimensional perspective by ensuring my</p>

	difficult for a third party to understand?		sketching only shows the relevant projections, faces and intricate details?
The Key Skills/ Technique	The sophistication and application of skills will become more advanced as students' progress through the essential, core and ambitious knowledge		
	Skill/Technique	How will this skill be developed?	
	Oblique Projection	Students will initially learn the basics of 3D sketching and attain general skills through oblique projection, focusing on the general pencil techniques, using the correct angles and parallel lines.	
	Crating	Students will develop their learning from previous lessons to use their basic shapes to construct more complex 3D shapes.	
	Isometric Projection	Students will spend several lessons learning the difference between Oblique and Isometric projection and why Isometric is the more effective method of design communication. Angles will be revisited and students will progress towards sketching products based off their own real-world perspectives of these objects.	
	Shading and Rendering	Students will learn how to effectively communicate the direction of light hitting each product as well as how to show through sketching which material is being used and what certain characteristics represent each material.	