

Year 9 Design Technology

Students develop the key skills that they have started in year 8, developing the range of materials knowledge specifically around plastics and metals. Their knowledge from the previous year is tested through retrieval questioning making reference back to previous projects in the form of tools and materials. Note each of the project's skills are closely linked to the previous years.

Year 9 Curriculum	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Topic(s)	<p>Brass Domino Students develop their understanding of working with different materials by using metal. Skills include : creating simple orthographic drawings showing three views; marking out using a scribe : preparing for drilling; centre punching and clamping; cutting and finishing brass to a high level; use of a go/no go gauge. Students are assessed on their making skills.</p>	<p>9 Photo Frame Students develop knowledge of using timber from year 8, marking out skills and focus on accuracy to produce a photo frame looking at wood joints and design skills.</p>	<p>Photo Frame Students develop knowledge of using timber from year 8, marking out skills and focus on accuracy to produce a photo frame looking at wood joints and design skills.</p>	<p>Year 9 Pewter Casting Development of a small Pewter design to meet the needs of the user. Analysis of products and manufacturing techniques including aluminium sand casting. Creation of ideas in 2D to meet the user needs 3D modelling using templates to test design thinking. 2D Design used to create moulds for Pewter casting which are laser cut. Planning and pouring of Pewter to complete cast.</p>	<p>Year 9 Pewter Casting Development of a small Pewter design to meet the needs of the user. Analysis of products and manufacturing techniques including aluminium sand casting. Creation of ideas in 2D to meet the user needs 3D modelling using templates to test design thinking. 2D Design used to create moulds for Pewter casting which are laser cut. Planning and pouring of Pewter to complete cast.</p>	<p>Year 9 Salt & Pepper Shaker Students develop timber specialist focusing on new skills of planing, possibly turning. They also look at finishing, vacuum forming and creative decoration.</p>

Assessment				Finishing the Pewter casting to create a quality product. Design and manufacture of a blister pack as a Point of Sale package for the casting, vacuum forming the blister. Analysing the designing and making through an evaluation of their work. Students are assessed upon their making and evaluation.	Finishing the Pewter casting to create a quality product. Design and manufacture of a blister pack as a Point of Sale package for the casting, vacuum forming the blister.. Analysing the designing and making through an evaluation of their work. Students are assessed upon their making and evaluation.	
	Practical work to be assessed, focus on marking out accurately as very small.	Design work to be assessed against creativity and originality.	Design work to be assessed against creativity and originality.	Design work to be assessed against creativity and complexity with focus on the layering system.	Practical work to be assessed, quality of finish.	Practical work assessed.

Independent Work

Key Fob- Google Sketchup drawing skills.
 Photo Frame- Complete designs which have been started in lesson and material knowledge quizzes.
 Pewter Casting - Completing designs on sketchup and designing marketing material.
 Salt & Pepper - Material knowledge based questions.