

SJBC Curriculum Termly Plan: Y7 Design and Technology

Term	Topic(s) and links to other subjects	Core Knowledge	Core Vocabulary	Assessment	Resources
Autumn 1	Health and Safety	Students are introduced to a workshop environment. They learn the routines and rules of being in a practical environment.			
	Logo Project	Students learn how to use CAD programme to design a logo based on their identity. We use this to brand all products they make throughout their time at SJBC. Skills: <ul style="list-style-type: none"> - CAD - CAM - Graphics design 	Iterative Design Computer Aided Design (CAD)	End of project assessment Skills audit Success criteria (formative assessment)	Booklets 2D Design
Autumn 2	3D Animal Scene	Students begin their first design and make project focused on a <i>3D Animal Scene</i> . This is their first project following the 4-stage format (Research, design, make and evaluate). <ul style="list-style-type: none"> - Product Analysis - Initial Design Ideas - Developed design ideas using CAD software (2D Design) Practical skills: <ul style="list-style-type: none"> - Marking and measuring - Cutting 	Design brief Creative Vectorise Template Accuracy Hand tools Manufactured Boards Finish Evaluation	End of project assessment Skills audit Success criteria (formative assessment)	Booklets 2D Design

		<ul style="list-style-type: none"> - Sanding - Drilling - Applying a finish (paint) 			
Spring	Charging Station	<p>Students move on to their second design and make project for Year 7. The Charging Station follows the same 4-stage format, research, design, make and evaluate, where students develop and build upon the skills they have learnt from the 3D Animal Scene. The Charging Station runs for the duration of the Spring Term.</p> <ul style="list-style-type: none"> - Design brief and specification - Product Analysis - Isometric Projection - Initial Design Ideas <p>Practical skills:</p> <ul style="list-style-type: none"> - Modelling - Marking out - Cutting - Sanding - Joinery techniques (halving joint) - Drilling - Applying a finish (paint, varnish or wood stain) 	<p>Specification</p> <p>Product Analysis</p> <p>Isometric Projection</p> <p>Innovate</p> <p>Prototype</p> <p>Accuracy</p> <p>Tenon Saw</p> <p>Halving Joint</p> <p>Quality Control</p> <p>Finish</p>	<p>End of project assessment</p> <p>Skills audit</p> <p>Success criteria (formative assessment)</p>	Booklets

SJBC Curriculum Termly Plan: Y8 Design and Technology

Term	Topic(s) and links to other subjects	Core Knowledge	Core Vocabulary	Assessment	Resources
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Autumn	Health and Safety	Students are introduced to a workshop environment. They learn the routines and rules of being in a practical environment.	Risk assessment COSHH Emergency Hazard PPE – Personal Protective Equipment		
	Pewter Casting	Students design and make a pewter keyring using a range of skills including: <ul style="list-style-type: none"> - Sketching concepts - CAD (2D design) - Pewter casting - Polishing - Filing - Drilling 	Design Brief Product Analysis Metal Alloy CAD Repeatability Stock Form Casting Process Mould Filing Resin	End of project assessment Skills audit Success criteria (formative assessment)	
Spring	Storage Box	Students design and make a storage box using a Mitre joint. They will use a range of skills including: <ul style="list-style-type: none"> - Perspective Drawing - Sketching Concepts - Modelling - Joinery techniques - Sanding - Gluing - Nailing/ tacking - Routering - 	Specification Existing Product Perspective Drawing Concept Ideas Pinewood MDF Prototyping Mitre Joint Routering Quality Assurance	End of project assessment Skills audit Success criteria (formative assessment)	

SJBC Curriculum Termly Plan: Y9 Design and Technology

Term	Topic(s) and links to other subjects	Core Knowledge	Core Vocabulary	Assessment	Resources
Autumn 1	Health and Safety	Students are reintroduced to a workshop environment. They learn the routines and rules of being in a practical environment.	Risk assessment COSHH Emergency		
Year 9 DT is run on a 3-way cycle carousel. This means each class will complete one of the 3 projects listed below each term.					
Project 1:	Desk Tidy	Students are tasked with designing and making a functional desk tidy based on a 20 th Century design movement. The project begins with introducing students to the <i>History of Design</i> . The project then focused on creativity and problem solving to be independent designers.	Design brief Specification Design movements Traditional Modernism Post-modernism Influence Prototype Scale Iteration	End of project assessment Skills audit Success criteria (formative assessment)	
Project 2	Architecture	Students are learning about the field of architecture. The task will be to design their own building based on an architectural style researched early in the project. Students will learn about famous architects and research the careers related to architectural design.	Design brief Specification Architecture Classical Modernism Organic CAD CAM Rapid Prototyping Two point perspective	End of project assessment Skills audit Success criteria (formative assessment)	

			Orthographic projection Rendering Interior Design Scale		
Project 3	Sustainable Lamp	Students learn how polymers are manufactured and this is put into practice by using recyclable materials collected as part of the schools Sustainability Initiative. Students design and make a working LED lamp using bottle caps and MDF material.	Design brief Specification Sustainability Recycling Manufacturing Polymers Resin Identification Soldering Concept design Moulding Quality control Testing	End of project assessment Skills audit Success criteria (formative assessment)	