

Year 7 Technology Mid-Term Plan

(1 x 75 min lesson per 2 weeks = 18 lessons)

	Autumn 1/Spring 2	Autumn 2/Summer 1	Spring 1/Summer 2	Spring 2/Autumn 1	Summer 1/Autumn 2	Summer 2/Spring 1
Topic	Wooden Car Project (9 x 75 mins)			LEGO Minifigure Project (9 x 75 mins)		
Project Learning Goal	Be able to understand the properties of different timbers and the tools/methods used to shape them.			Be able to understand how to respond effectively to a Design Brief by using relevant research and design methods to help develop a range of appropriate ideas.		
Big Ideas	<ul style="list-style-type: none"> ▪ Master Woodworking Skills ▪ Master Timber Knowledge 			<ul style="list-style-type: none"> ▪ Master Design/Modelling Skills ▪ Master The Design Process 		
Key Knowledge	<ul style="list-style-type: none"> ▪ Understand how to work with timbers using a range of relevant tools and processes, alongside knowledge development of this material area. ▪ Understand workshop health & safety, and safe and proper use of tools and equipment. ▪ Understand project requirements/aims, and evaluation of outcomes. 			<ul style="list-style-type: none"> ▪ Understand the common design process, looking at concept design, which includes research, analysis of existing products, design specification, and project evaluation. ▪ Understand the importance of analysing existing products to help generate success criteria and inform relevant design ideas. 		
Key Vocabulary	Steel Rule, Tenon Saw, Try-Square, Bench Hook, Marking Gauge, Plane, Pillar Drill, Sanding Machine. Timber, Softwood, Coniferous, Hardwood, Deciduous, Manufactured Boards, Design Brief, Orthographic Drawing, Manufacturing Plan, Evaluation.			Design Process, Design Brief, Primary Research, Secondary Research, Target Market, Mood Board, Existing Product Analysis, Design Specification/Success Criteria, Design Ideas, Final Design Intention, Isometric Drawing, Packaging, Vacuum Forming, Thermoforming Plastic, Thermosetting Plastic, CAD and CAM (Computer Aided Design/Manufacture).		
Topic Relevance	Working with timbers introduces pupils to material properties and practical applications, reinforcing understanding of construction and creativity. Developing knowledge of workshop health and safety ensures they use tools responsibly and safely, structuring the approach to making. Understanding project requirements and evaluating outcomes encourages critical thinking, problem-solving, and reflection —essential skills for improving designs and ensuring functionality. These skills lay the foundation for more advanced design and technology concepts in preparation for KS4 GCSE Art & Design: Three-Dimensional Design.			Learning the design process —from research to evaluation—teaches structured problem-solving and creativity. These areas help pupils build on knowledge from KS2, allowing them to further develop key design and technology skills, such as considering specific target markets. Analysing existing products helps pupils understand design strengths and weaknesses, guiding them to create informed and improved ideas. Together, these skills build confidence in planning, designing, and reflecting, supporting innovation and practical thinking in technology. These skills introduce concepts in preparation for KS4 GCSE Art & Design: Three-Dimensional Design.		
Assessment	Do It Now/Exit Tickets, Low-stakes quiz (Knowledge Check) (week 4-5) Practical Evaluation, Key assessment at the end of project (week 8-9).			Do It Now/Exit Tickets, Low-stakes quiz (Knowledge Check) (week 4-5) Practical Evaluation, Key assessment at the end of project (week 8-9).		
Practical Skills Mastery	<ul style="list-style-type: none"> ▪ Be able to choose and use a variety of woodworking tools accurately, demonstrating independence and confidence when working. ▪ Be able to consider presentation when painting the car, resulting in a high-quality outcome. 			<ul style="list-style-type: none"> ▪ Be able to produce a high-quality, original concept LEGO minifigure design. ▪ Be able to produce an effective packaging design, which includes all necessary information. ▪ Be able to consider presentation when decorating the product, resulting in a high-quality outcome. 		
Theoretical Knowledge Mastery	<ul style="list-style-type: none"> ▪ Be able to explain the difference between deciduous and coniferous timbers, giving examples of both hardwoods and softwoods. ▪ Be able to describe what a manufactured board is and give a range of examples. ▪ Be able to identify and explain the use of woodworking tools. 			<ul style="list-style-type: none"> ▪ Be able to use a Design Process effectively to inform new design concepts. ▪ Be able to make conclusions from research, explaining how it can be used when developing designs and when making. ▪ Discuss my ideas with the target market ▪ Be able to produce and use a Design Specification effectively. ▪ Be able to produce a detailed evaluation. 		

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	Autumn 1/Spring 2	Autumn 2/Summer 1	Spring 1/Summer 2	Spring 2/Autumn 1	Summer 1/Autumn 2	Summer 2/Spring 1
Start and End Point	Start: Project Introduction – Understanding of task and success criteria and address misconceptions from previous project. End: Key Assessments and final practical evaluation.			Start: Project Introduction – Understanding of task and success criteria and address misconceptions from previous project. End: Key Assessments and final practical evaluation.		
Values Curriculum	Knowledge, Continuous improvement, Character, High Expectations & Leadership Resilience through independent practical and design to show creativity and problem-solving. Respect of health & safety, facilities and consideration to others. Responsibility with potentially dangerous tools and equipment when in a workshop. Supporting peers and teamwork.					
Students Areas of Assessment	Knowledge: Health & Safety, timbers, woodwork tools, design process and concept design. Skills: Woodwork practical skills, and ability to use tools safely and accurately. Production of concept design and packaging. Application: Planning, application of practical skills, and evaluating.					
Memory Retrieval	Mastery curriculum revisits topics (health & safety, materials, tools, processes) across subsequent lessons. Retrieval practice through questioning, cold-calling, recap of tasks, and practical.					
Disciplinary Literacy	Reading and interpreting project requirements, careful and considered planning, writing evaluations to reflect on outcomes and successes. Using subject-specific vocabulary accurately.					
Alignment with Long Term Plan	The mid-term plans reflect the progression and content outlined in the long-term plan and Big Ideas document. Practical and theoretical elements are consistently aligned with skills needed to access GCSE level curriculum at KS4.					
Context	Career Pathways: Topics within the subject are linked to trades, manufacturing industry and design careers.					