

	Autumn 1 7 weeks	Autumn 2 7 weeks	Spring 1 5 weeks	Spring 2 5 weeks	Summer 1 5 weeks	Summer 2 7 weeks
Learning Objectives	Design and Technology Skills: Theory: - What is good Design - The role and responsibility of a designer - Design Strategies/Process - Material Properties/forces - Timber - Origin and impact - Timber - Hard wood/soft wood - Timber - manufactured boards Project 1: Design Communication practice: Investigation Design - Isometric 1 point perspective 2-point perspective - Oblique Manufacture Evaluation Project 2: Timber Christmas Tea Light Investigation - Analysis of the design brief - Research - Specification Design - Thumbnails – Christmas light - Card model - Developed version Manufacture Evaluation - Thumbnails against specification - Feedback	Design and Technology Skills: Theory: - Polymers - Paper Board - Textiles - Metals Topic Test - Electronic - Topic test review Project 2: Timber Christmas Tea Light Investigation Design - Final Design Manufacture - Manipulate 1 meter of pine into a high-quality finished outcome Evaluation - Peer feedback - Final project WWW/EBI – what have I learnt	Design and Technology Skills: Theory: - Cad/Cam - New Emerging technology – Industrial revolution - New Emerging technology – Automation - Crowdfunding/Fairtrade/ Cooperatives - Laser cutter set up - Sustainability – 6rs - Sustainability - LCA Project 3:CAD/CAM- 2D Laser cutter Investigation: Design: Personal keyring Make: Acrylic Keyring Evaluation:	Design and Technology Skills: Theory: - Energy Generation – fossil fuels - Energy Generation – Alternative energies - Energy Generation – Storage Topic Test - Topic test review Project 4: Scaled Plywood furniture Investigation: - Design Brief - Research - Specification Design: - Sketch models/Thumbnails Project 4B: Plywood manipulation techniques - Wood Joints - Lamination - Finishing techniques	Design and Technology Skills: Theory: - Work of others - Mechanisms – Gears - Mechanisms – Cam and Follower - Mechanism – Levers and linkages - Mechanism – Pully & Belts Project 4: Scaled Plywood furniture Investigation: - Further research Design: - Initial design ideas - Cardboard development - Final design - Manufacturing specification Make: - Scaled seating – flatpack - Combination of wood joints Evaluation: - Testing against specification - Evaluation with modification suggestions	Design and Technology Skills: Theory: - Production Aid - Scale of production - Sustainability – 6rs - Sustainability - LCA Project 4: Scaled Plywood furniture Make: - Scaled seating – flatpack - Combination of wood joints Evaluation: - Final evaluation of outcome www/ebi – What have I learnt
Assessment	- Homework - marked in line with the Kingsdale ESD code - Depth of knowledge/presentation - Isometric Camera drawing - Thumbnail Creativity	- Homework - marked in line with the Kingsdale ESD code Depth of knowledge/presentation - Topic Test – week 5 ✓ Covered Theory - Quality of outcome - Machine and tool confidence - H&S independence	- Homework - marked in line with the Kingsdale ESD code Depth of knowledge/presentation - CAM outcome complexity and independence - Grasp of user needs and wants features in final design	- Homework - marked in line with the Kingsdale ESD code Depth of knowledge/presentation - Topic Test – week 5 ✓ Covered Theory - Quality and accuracy of outcome. - Application of finish and decoration - Suitable scale and function	End of year assessment week May 2025 and final reports - Homework - marked in line with the Kingsdale ESD code Depth of knowledge/presentation - Exploded drawing and Orthographic drawing of automaton - Presentation complicity and confidence	- Parents Evening - Homework - marked in line with the Kingsdale ESD code Depth of knowledge/presentation - Completion of project - Match to designer style to final outcome - Functionality
Extra Curricular		- Lunch club/support for practical work progress - After School Theory support	- Lunch club/support for practical work progress - After School Theory support	- Lunch club/support for practical work progress - After School Theory support	- Lunch club/support for practical work progress - After School Theory support	- Lunch club/support for practical work progress - After School Theory support