SUBJECT: DESIGN & TECHNOLOGY YEAR 7 OVERVIEW

	Autumn	Spring	Summer
Starter topics	➢ *Parallel lines/weighting* ➢ *Basic 2D shapes* ➢ *Free-hand lines* ➢ *More complex 2D shapes* ➢ *Applying colour* ➢ *Labelling*	➢ *Shading a gradient* ➢ *Using a grid/guide* ➢ *Front view* ➢ *Side view* ➢ *Plan view* ➢ *Adding dimensions*	➢ *Compass & colour wheel* ➢ *Front & side view* ➢ *More 2D complex shapes* ➢ *Hidden lines* ➢ *Showing movement* ➢ *Scale*
Project & Objectives	**Health & Safety Intro** An introduction to the subject and a workshop for most. The focus is on understanding safety rules/expectations in the workshop environment. **Keyring Project** Design, cut, shape and finish an acrylic keyring in the workshop. Taking pride in quality outcomes.	**Fridge Magnet Project** With the first project all about hand skills, students now get to use design software (2D Design) and the laser cutter to manufacture their fridge magnet. They use plywood for this project and are taught about the benefits of this materials regarding both sustainability and aesthetic qualities.	**Car Project** The progression here is that students now use both traditional workshop/hand skills, combined with CAD/CAM (laser cutter) to manufacture their toy car. The body of the car is marked-out using a template then cut, drilled and shaped by hand, whilst the wheels are manufactured using the laser cutter.
Acquired Knowledge / Skills	• Workshop safety rules & symbols • Risk assessments • Measuring in mm & templates • Writing a Design Brief • Properties of plastic • Laminating with appropriate adhesives • Cutting using a coping saw • Use of a pillar drill • Shaping material using a hand file • Glass paper & grading • Polishing wheel	• Healthy lifestyle • Sketching techniques • 2D Design (CAD software) • Sketchup (3D CAD modelling) • Laser cutting & CAD/CAM methods • User /client profile • Properties of plywood/laminates • Sustainability • Adhesives / PVA • Finishes (paint/dye) • Testing & evaluating	• Sustainability & the FSC stamp • Softwoods & Hardwoods • Manmade boards • Properties of materials • More advanced CAD skills (2D Design) • Coping/tenon saw • Sanding shaping by hand • Applying a finish (wax/varnish) • Peer evaluation • Packaging/nets (extension task) • 3D CAD (Sketchup)
Target Vocabulary Rights Respecting	*Tier 2 vocab: Risk, assess, quality, research.* *Tier 3 vocab: 2D, property, brittle, polish* *Safety rules/signs.* Article 3: Best interests of the child (behaviour policy)	*Tier 2 vocab: Batch, accurate, test, evaluate.* *Tier 3 vocab: CAD, CAM, adhesive, aesthetics, laminate.* *Promotes healthy lifestyle.* Article 24: Right to health (what a balanced and healthy life looks like)	*Tier 2 vocab: Sustainable, impact, promote.* *Tier 3 vocab: Grain, finish, FSC, ergonomics, PVA, net.* ***F**orestry **S**tewardship **C**ouncil.* Article 27: Right to adequate standard of living (& exposing them to others who do not have this right)
Assessment	**Students submit both a design folder & product:** ➢ 40 marks - Design folder ➢ 40 marks - Making ➢ 20 marks - End of project test ➢ Total of 100 marks % then converted to 1-9 level for overall progress	**Students submit both a design folder & product:** ➢ 40 marks - Design folder ➢ 40 marks - Making ➢ 20 marks - End of project test ➢ Total of 100 marks % then converted to 1-9 level for overall progress	**Students submit both a design folder & product:** ➢ 40 marks - Design folder ➢ 40 marks - Making ➢ 20 marks - End of project test ➢ Total of 100 marks % then converted to 1-9 level for overall progress