



Design Technology Curriculum Overview - 7/8/9																	BE THE BEST YOU CAN BE														
		Autumn 1				Autumn 2				Spring 1				Spring 2		Summer 1				Summer 2											
Reporting Y7						CfCs						BfL & LAL										BfL &									
Year 7		Health and safety instruction		Jewellery project - this is the only project in KS3 that covers all aspects of a "design and make task". Students will cover the following skills to a basic level; brief analysis and research, design ideas (learning how to draw in 3d, render, annotate), development, planning, manufacture (one off and batches) and evaluation. Machines: Scroll saw. Material focus: 3mm MDF, Pewter. Process: casting. Maths link: percentages, calculating manufacturing costs and adding profits. Extended writing: evaluation.								Graphics module: 4x groups rotate through 113 to complete the CAD part module, learning Coreldraw - used in KS4 DT, Engineering and Graphic Design. Introduction to Isometric drawing, surface and tonal rendering. Trinket box project: making task with focus on designing and further drawing skills. Machines: Linisher and pillar drill. Material focus: Plywood, PVA, wooden dowell. Processes: changing saw blades								Coaster project: Looking at design in different cultures, themes and trends that take place. Designing and making 4 coasters with a repeating pattern, consideration of colour. Machines: Scroll saw, Linisher and pillar drill. Material focus: MDF, dowell. Processes: changing saw blades, chanigng pillar drill bits								Curriculum Enrichment		Week	
Reporting Y8						CfCs						BfL & LAL										BfL &									
Year 8		Health and safety instruction		Rotation of 3x projects - To allow all groups to complete the graphics project in 113. Graphics project: Endangered species 6 week project where students research and investigate causes why animals become endangered - links to ecological concerns. Culminating in a logo that can be used for branding on promotional items, to promote awareness of endangered or extinct animals. Skills: research of endangered species, analysis of logo design, design and development of ideas in CAD (building on coreldraw skills taught in Y7). Birdfeeder project: Introduction to Engineering. Materials: Aluminium sheet, HIPS Processes: reading orthographic drawings, marking out, cold metal forming, vacuum forming, riveting. Maths link: Tolerances, measurements. Clocks: Development of practical skills using the 3x main workshop machines. Materials: 6mm MDF. Processes: developing cutting skills, drilling and material finishes. Literacy: writing a design specification								Bug boxes: skills covered, design ideas drawn in 3d, rendered, planning and development of ideas. Building on skills and competences developed during Y7, students have more scope for customisation. Changing drill bits. Material: locally sourced softwood, plus reclaimed materials from previous projects. Literacy: consideration of sustainable issues through describing the 6 R's.								Curriculum Enrichment		Week									
Reporting Y9						CfCs						BfL & LAL										BfL &									
Year 9		Health and safety instruction		Timbers: Students learn about timber production and their link to Environment and sustainability, understanding how softwoods and hardwoods differ in their rate of growth and ethical choices surrounding them, how manufactured boards are made. Materials: Pine, plywood, hard wood off cuts. Processes: construction techniques, scroll saw and sanding, laminating, natural timber finishes.				Polymers: Students learn about Polymer production and their impact on the environment, link to Environment and sustainability through teaching around crude oil, introduction to iterative design (phone holder), commercial production, classifications of two types of polymer. Materials: Acrylic. Processes: Strip heater, vacuum forming, injection moulding. CAD/CAM: Laser cut models. Focus of folderwork: creative design and presentation.				Systems and Control: Students solder a nightlight circuit, learing about; PCB production, input - process - output, component symbols and values (links to circuits and electricity in Science KS2 and 3) Maths link: Resistor colour codes, tolerances, nets. Processes: Soldering, manufacture of net for packaging.				Pen Pot project: Focused team working project where students have to produce a batch of pen pots. Also three week Engine House architecture project: Community Cohesion and understanding Cornish Heritage				Curriculum Enrichment		Week									