CURRICULUM Mapping Year 10



4/6 Lessons								EOY Assessment F
Theory							HT6:	HT1 – HT6
2/6 Lessons						HT5	Overarching unit	
Practical				HT4:	Assessment Point: Summative or AFL	Overarching unit intent:	intent: <u>Designing and</u> making principles	<u>Key Disciplinar</u> <u>Knowledge</u>
	HT2:	Assessment Point:M Summative or AFL	HT3: Overarching unit intent: Smart materials	Polymer additives <u>Textiles</u> <u>Natural fibres</u> Cotton – Properties &	HT3 and HT4 (with elements of HT1 and HT2) <u>Key disciplinary</u>	Designing and making principles - <u>NEA</u> Analysis of each	- NEA Customer profile Existing products	Designing and mal principles <u>Key Concepts</u>
HT1: <u>Overarching unit</u> <u>intent:</u> <u>Core Technical</u> <u>Principles</u> New and emerging Enterprise Sustainability Disposal of waste People Culture Society Environment <u>Designing and making principles</u> Xmas project Temporary accommodation over Christmas Design a product to bring xmas cheer	Overarching unit intent: Production techniques and systems How the critical evaluation of new and emerging technologies informs design decisions Energy generation and storage Renewable energy Energy storage systems, including batteries	Key disciplinary knowledge New and emerging technologies – End of unit test Energy generation and storage – End of unit test Key Concepts technologies Industry/Automation/Use of robotics Innovation/crowd funding/ virtual marketing & retailing. Co-operative/ Fair trade Finite resources, non-	Technical textiles Understanding a systems approach when designing Systems approach explained Input devices Outputs LED's Buzzers and speakers Mechanical devices Movement – Linear motion Changing magnitude and direction of force ratio = Teeth driven	common uses Wool Silk <u>Synthetic fibres</u> Polyester – Properties & common uses Nylon Elastane <u>Blended and mixed</u> <u>fibres</u> Polycotton Wool&nylon <u>Woven fabrics</u> Warp Weft <u>Non woven fabrics</u> Felted fabrics	knowledge Developments in new materials – End of unit test Materials and their working properties – End of unit test <u>Key Concepts</u> Modern materials Smart materials Technical textiles	theme Problem/solution Research Design possibilities Careers Past pupil to either come in or share video sharing career pathway and showcase work. With advice and guidance for future	Specification Initial design Development	Analytical research Continual evaluatio and development Innovation and creativity
be sign a product to dring single actions to family in temporary shelter. Garment/smas decoration/kids soft toy, Develop an analytical mood board researching chosen product. Complete analysis of existing products. (4/6 products must be analysed) Source a suitable customer and profile the customer Write a specification for the product you will design and make Design a suitable product using the profile and specification as guidance Create spot and cross patterns of sertions	Developments in new materials Modern materials Graphene Metal foam Titanium Coated metals Liquid crystal display Nanomaterials Teflon Corn starch polymers Careers	finite resources Ecological footprint/social footprint Harm caused by landfills, Resource recovery, energy recovery, incineration Designing products which meet the needs of everyone in society Needs of all groups of people, inc those with disabilities, cultures	Teeth driver <u>Materials and their</u> <u>working properties</u> Paper and boards Boards Natural and manufactured timbers Hardwoods Softwoods Manufactured boards Metal and alloys Alloys	Bonded fabrics Bonded fabrics Knitted textiles Weft knit Warp knit Material properties Physical properties Mechanical Design and making principles: Mini NEA Problem/solution Analyse task Customer profile Analysis of existing products Specification	Textiles – Natural fibres Synthetic fibres Blended/mixed fibres Woven fabrics Non woven fabrics Knitted textiles Material properties			

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With God all things are possible Matthew 19:26



Construct garment Test and evaluate garment Careers Design and production skills gained in D&T Discussion of courses papst pupils have gone onto Discussion on past pupils FE work display in CS23	Different roles available in the design field	Fossil fuels Renewable energy		Design Development Garment construction Catholic Social Teaching - The common good/ dignity of work/ Solidarity				
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