



2020-2021 Curriculum Map
DESIGN TECHNOLOGY – RESISTANT MATERIALS AND TEXTILES

Year	Context	Key Knowledge and Concepts
7	TEXTILES Cushions (7)	Learners will know: <ul style="list-style-type: none"> ✓ Machine skills – threading, use a bobbin, Difference between zigzag, straight stitch ✓ Needle skills – threading a needle ✓ Existing products can inspire new designs ✓ Tie dye – dying technique with unknown outcomes and effects ✓ Block painting, stencilling, stamping are printing techniques with a controlled outcome ✓ Couching and applique are decorative techniques that combine materials using a sewing machine ✓ Decorative techniques result in different effects. Some will meet the customer’s needs better than others ✓ Seam allowance is used to make sure the product is well constructed and ensures the final product is the correct size ✓ Products are created with a customer in mind ✓ Researching customer preference ensure the product meets expectations ✓ A design brief sets out parameters for a product ✓ Evaluation helps identify what made a product functional to inform future projects
7	TEXTILES Bag for Life (2/3)	Learners will know: <ul style="list-style-type: none"> ✓ Suitability of materials ✓ Sustainability ✓ Six Rs ✓ Pattern cutting



Year	Context	Key Knowledge and Concepts
7	RM Book Ends	<p>Learners will know:</p> <ul style="list-style-type: none"> ✓ Tools are identified to achieve the desired outcome ✓ A coping saw is a hand saw that allows cutting in different directions ✓ A hack saw is a hand saw that is used to cut in one direction ✓ Measuring, marking out ✓ Counter sinking enlarges a hole for a screw to sink into ✓ Selecting materials – consider the wood options – define appropriateness ✓ A pillar drill is a vertical drill to make precise holes ✓ Wood grain is the direction of the wood growth which affects how the wood is cut ✓ Different woods are suitable for different purposes ✓ Soft wood is from evergreen or coniferous trees (fast growing) ✓ Hard wood takes longer to mature ✓ Sanding is used to finish a product to a high quality ✓ A Band facer is a sanding machine used by industry ✓ Finishing techniques improve quality to make the product appealing to the customer ✓ Sanding, painting, sealing, filing are all finishing techniques ✓ Research ideas: ✓ Potential bookend themes ✓ Researching existing products creates ideas for a mood board ✓ Gathering information from a customer supports the design specification ✓ Design specification provides accurate information and detail about the design of the product ✓ The design process is forever changing and evolving ✓ Design plan takes account of the measurements and upscaling ✓ Upscaling is the process of considering how a design can be made for mass market – price, traceability, sustainability ✓ Prototypes are a mock-up of the final design- to give it a clear indication of colour, size and how it will work ✓ The prototype will identify any issues with the final product ✓ Products are tested for their suitability in meeting the design specification and customer satisfaction ✓ Customer satisfaction is how happy the customer is with the product



2020-2021 Curriculum Map
DESIGN TECHNOLOGY – RESISTANT MATERIALS AND TEXTILES

Year	Context	Key Knowledge and Concepts
8	TEXTILES Drawstring Bag (8)	Learners will know: <ul style="list-style-type: none"> ✓ Design brief could include budgetary constraints, environmental considerations, aesthetic suggestion and purpose considerations ✓ Purpose of the product influences design decisions ✓ Analysis of existing products is used to formulate new ideas ✓ Design choice relies on suitability for purpose ✓ Evaluation judges suitability of the product for its intended purpose and quality of construction ✓ Fabrics are constructed from natural resources or man-made resources that are different in their primary form ✓ Seam allowance not required for every edge of the final piece ✓ Seam allowance is built into different parts of the design ✓ Patterns are a 2 dimensional representation of a 3 dimensional product
	TEXTILES Fabric container with fastening (4)	Learners will know: <ul style="list-style-type: none"> ✓ Attaching fastenings ✓ Seam allowances ✓ Effective market research ✓ Prototypes, evaluating, refining, creating, evaluating. ✓ Effective collaborative working ✓ Sourcing and justifying suitable fabrics ✓ Sustainability



Year	Context	Key Knowledge and Concepts
8	RM Book Ends	<p>Learners will know:</p> <ul style="list-style-type: none"> ✓ Tools are identified to achieve the desired outcome ✓ A coping saw is a hand saw that allows cutting in different directions ✓ A hack saw is a hand saw that is used to cut in one direction ✓ Measuring, marking out ✓ Counter sinking enlarges a hole for a screw to sink into ✓ Selecting materials – consider the wood options – define appropriateness ✓ A pillar drill is a vertical drill to make precise holes ✓ Wood grain is the direction of the wood growth which affects how the wood is cut ✓ Different woods are suitable for different purposes ✓ Soft wood is from evergreen or coniferous trees (fast growing) ✓ Hard wood takes longer to mature ✓ Sanding is used to finish a product to a high quality ✓ A Band facer is a sanding machine used by industry ✓ Finishing techniques improve quality to make the product appealing to the customer ✓ Sanding, painting, sealing, filing are all finishing techniques ✓ Research ideas: ✓ Potential bookend themes ✓ Researching existing products creates ideas for a mood board ✓ Gathering information from a customer supports the design specification ✓ Design specification provides accurate information and detail about the design of the product ✓ The design process is forever changing and evolving ✓ Design plan takes account of the measurements and upscaling ✓ Upscaling is the process of considering how a design can be made for mass market – price, traceability, sustainability ✓ Prototypes are a mock-up of the final design- to give it a clear indication of colour, size and how it will work ✓ The prototype will identify any issues with the final product ✓ Products are tested for their suitability in meeting the design specification and customer satisfaction ✓ Customer satisfaction is how happy the customer is with the product
	Sustainability project (4)	<ul style="list-style-type: none"> ✓ Disposable culture ✓ Consumerist culture ✓ Waste in society – single use plastics



2020-2021 Curriculum Map

DESIGN TECHNOLOGY – RESISTANT MATERIALS AND TEXTILES

Year	Context	Key Knowledge and Concepts
		<ul style="list-style-type: none">✓ Alternative to using plastics – greater awareness of environmental issues✓ Design an alternative outcome for reducing plastic use