

Meadow Park Design Technology/BTEC Construction Curriculum

Year Group	Autumn A	Autumn B	Spring A	Spring B	Summer A	Summer B
KS1	Focus: Picnics & Parties	Focus:	Focus: Edible Garden	Focus:	Focus:	Focus:
	Key Skills: <ul style="list-style-type: none"> • Design: <ul style="list-style-type: none"> • Design a simple plan. • Design a purposeful, functional, appealing product. • Make: <ul style="list-style-type: none"> • Select from and use a range of tools and equipment to perform practical tasks • Use ideas to make something. • Use the basic principles of a healthy and varied diet to prepare food. • Evaluate: <ul style="list-style-type: none"> • Evaluate ideas and products against design criteria. 	Key Skills:	Key Skills: <ul style="list-style-type: none"> • Design: <ul style="list-style-type: none"> • Design a simple plan. • Design purposeful, functional, appealing product. • Make: <ul style="list-style-type: none"> • Select from and use a range of tools and equipment to perform practical tasks • Use ideas to make something. • Use the basic principles of a healthy and varied diet to prepare food. • Evaluate: <ul style="list-style-type: none"> • Evaluate ideas and products against design criteria. 	Key Skills:	Key Skills:	Key Skills:

			<ul style="list-style-type: none"> • I can come up with a range of ideas after collecting information from different sources • Can create a detailed step-by-step plan • I can suggest alternative plans; outlining the positive features and draw backs • I can explain how a product will appeal to a specific audience • I can evaluate appearance and function against original criteria • I can use a range of tools and equipment competently. • I can make a prototype before make a final version 	<ul style="list-style-type: none"> • I can come up with a range of ideas after collecting information from different sources • Can create a detailed step-by-step plan • I can suggest alternative plans; outlining the positive features and draw backs • I can explain how a product will appeal to a specific audience • I can evaluate appearance and function against original criteria • I can use a range of tools and equipment competently. • I can make a prototype before make a final version 		
	Focus: Felt phone cases	Focus: Programming adventures	Focus: Automata animals	Focus: Super seasonal cooking	Focus: Marbulous structures	Focus: Global food
Year 6	Key Skills: <ul style="list-style-type: none"> • Use research and develop design criteria to 	Key Skills: <ul style="list-style-type: none"> • Apply their understanding of computing to 	Key Skills: <ul style="list-style-type: none"> • Use research and develop design criteria to 	Key Skills: <ul style="list-style-type: none"> • Understand seasonality and know where and 	Key Skills: <ul style="list-style-type: none"> • Investigate and analyse a range of existing 	Key Skills: <ul style="list-style-type: none"> • Understand seasonality, and know where and

	<p>inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</p> <ul style="list-style-type: none"> • Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, pattern pieces • Select from and use a wider range of materials and components, including textiles, according to their functional properties and aesthetic qualities • Evaluate their ideas and products against 	<p>program, monitor and control their products</p> <ul style="list-style-type: none"> • Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided • Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups • Select from and use a wider range of materials and components, including 	<p>inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups</p> <ul style="list-style-type: none"> • Understand and use mechanical systems in their products • Select from and use a wider range of materials and components, including textiles, according to their functional properties and aesthetic qualities • Select from and use a wider range of tools and equipment to perform practical tasks (for example cutting, shaping, joining and finishing), accurately • Evaluate their ideas and products against 	<p>how a variety of ingredients are reared caught and processed</p> <ul style="list-style-type: none"> • Understand and apply the principles of a healthy and varied diet • Select from a wider range of ingredients, according to their functional properties and aesthetic qualities • Consider the views of others to improve their work • Generate, develop, model and communicate their ideas through discussion and annotated sketches • Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • Evaluate their products against their own design 	<p>products</p> <ul style="list-style-type: none"> • Apply their understanding of how to strengthen, stiffen and reinforce more complex structures • Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately • Select from and use a wider range of materials and components according to their functional properties and aesthetic qualities • Evaluate their ideas against their own design criteria and consider the views of others to improve their work 	<p>how a variety of ingredients are grown</p> <ul style="list-style-type: none"> • Understand and apply the principles of a healthy and varied diet • Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques • Use a wide variety of basic food skills such as peeling, juicing and dicing and some advanced skills such as baking
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	their own design criteria	construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	their own design criteria and consider the views of others to improve their work <ul style="list-style-type: none"> Understand and use mechanical systems in their products 	criteria		
Year 7	Focus: TEXTILES The Day of the Dead	Focus: TEXTILES The Day of the Dead	Focus: RESISTANT MATERIALS Picture frames	Focus: RESISTANT MATERIALS Picture frames	Focus: PRODUCT DESIGN Denim Bag	Focus: PRODUCT DESIGN Denim Bag
	Key Skills: <ul style="list-style-type: none"> Be able to identify the user of a product Be able to identify some of the features of a product I am designing 	Key Skills: <ul style="list-style-type: none"> Be able to draw one design idea Be able to talk about my ideas with my teacher and explain the reason behind the design 	Key Skills: <ul style="list-style-type: none"> Be able to show a basic understanding of the properties of some different materials Be able to perform some basic tests on my product 	Key Skills: <ul style="list-style-type: none"> Be able to say how I intend to make my product using flow charts 	Key Skills: <ul style="list-style-type: none"> Be able to choose and use tools/equipment correctly and safely at all times Be able to make a product with some aesthetic appeal 	Key Skills: <ul style="list-style-type: none"> Be able to make some comparisons between my product and existing products Be able to identify verbally where my product was successful and where it requires improvement
Year 8	Focus: TEXTILES The Day of the Dead	Focus: TEXTILES The Day of the Dead	Focus: RESISTANT MATERIALS Picture frames	Focus: RESISTANT MATERIALS Picture frames	Focus: PRODUCT DESIGN Denim Bag	Focus: PRODUCT DESIGN Denim Bag
	Key Skills: <ul style="list-style-type: none"> Describe the features of two similar products Be able to explain why some of the features and 	Key Skills: <ul style="list-style-type: none"> Be able to draw two design ideas that are related to the design brief Be able to produce 	Key Skills: <ul style="list-style-type: none"> Be able to show good understanding of the properties of a broad range of common 	Key Skills: <ul style="list-style-type: none"> Be able to use Gantt charts to show the stages of production 	Key Skills: <ul style="list-style-type: none"> Be able to choose and use tools/equipment with some independence, dexterity and knowledge of 	Key Skills: <ul style="list-style-type: none"> Be able to investigate new and emerging technologies for design and manufacturing Be able to

	characteristics in my design are important	detailed product designs that show creativity and some complexity	<ul style="list-style-type: none"> materials Be able to carry out brief tests on my product in order to identify its strengths and weaknesses 		<p>correct sequencing during practical work</p> <ul style="list-style-type: none"> Be able to make a product with strong aesthetic appeal and a degree of individuality 	identify in writing where my product was successful and where it requires improvement
	Focus: TEXTILES The Day of the Dead	Focus: TEXTILES The Day of the Dead	Focus: RESISTANT MATERIALS Picture frames	Focus: RESISTANT MATERIALS Picture frames	Focus: PRODUCT DESIGN Denim Bag	Focus: PRODUCT DESIGN Denim Bag
Year 9	<p>Key Skills:</p> <ul style="list-style-type: none"> Analyse all features of two comparable products Be able to carry out research into all of the features and characteristics of the product I am designing 	<p>Key Skills:</p> <ul style="list-style-type: none"> Be able to draw and label multiple ideas that relate to the design brief be able to demonstrate a high degree of complexity, innovation and individual flair in my product designs 	<p>Key Skills:</p> <ul style="list-style-type: none"> Be able to excellent understanding of the full range of materials and technology available Be able to carry out detailed and thorough tests in order to identify strengths and weaknesses in both the product and the designing and making process 	<p>Key Skills:</p> <ul style="list-style-type: none"> Be able to evaluate each stage of production saying if it was successful or not 	<p>Key Skills:</p> <ul style="list-style-type: none"> Be able to choose and use tools/equipment with independence and a high degree of dexterity and mastery throughout practical work Be able to make a product with unique and distinctive aesthetics 	<p>Key Skills:</p> <ul style="list-style-type: none"> Be able to relate my evaluation to current environmental, ethical, social and/or cultural issues in a clear and relevant manner Be able to continuously evaluate the successes and shortcomings of my project throughout the designing and making process
	Focus: Unit 14: Developing Carpentry skills	Focus: Unit 14: Developing Carpentry skills	Focus: Unit 15: Developing Joinery skills	Focus: Unit 15: Developing Joinery skills	Focus: Unit 16: Developing Painting skills	Focus: Unit 17: Developing decorating skills
Year 10	<p>Key Skills:</p> <ul style="list-style-type: none"> Working with simple hand tools Use of power tools: 	<p>Key Skills:</p> <ul style="list-style-type: none"> Tool identification Mitre joints t-halving joints 	<p>Key Skills:</p> <ul style="list-style-type: none"> Band saw safety Planing/sanding skills (finishing) 	<p>Key Skills:</p> <ul style="list-style-type: none"> PPE identification List and describe appropriate PPE 	<p>Key Skills:</p> <ul style="list-style-type: none"> Tool identification Safe use of low-level access equipment 	<p>Key Skills:</p> <ul style="list-style-type: none"> Tool identification Preparing surfaces Hanging paper

	router table, electric drill	<ul style="list-style-type: none"> • cross-halving joints 	<ul style="list-style-type: none"> • Use of biscuit jointer 	<ul style="list-style-type: none"> • Product testing (load testing) 	<ul style="list-style-type: none"> • Applying Water & oil-based paints 	<ul style="list-style-type: none"> • Working around obstructions (light switches/sockets)
	Focus: Unit 1: Producing a timber product	Focus: Unit 2: Decorating Household Goods	Focus: Unit 3: Developing Home Improvement Skills	Focus: Unit 20: Developing Building Maintenance Skills	Focus: Unit 20: Developing Building Maintenance Skills	Focus: Timber product of pupils' design
Year 11	<p>Key Skills:</p> <ul style="list-style-type: none"> • Dovetail joints • Corner bridle joints • Use of router table • Creating wooden storage box 	<p>Key Skills:</p> <ul style="list-style-type: none"> • Sanding • Stripping paint • Upscaling • Painting • Finishing (wax or varnish etc.) 	<p>Key Skills:</p> <ul style="list-style-type: none"> • Fitting/fixing hinges • Hanging shelves • Replace socket covers (not wired) • Wire plugs/ change fuses • Seal around sink 	<p>Key Skills:</p> <ul style="list-style-type: none"> • Repairing plasterwork • Touching up paint work • Replace skirting boards 	<p>Key Skills:</p> <ul style="list-style-type: none"> • Fix sticking doors • Fix squeaky floorboards • Replace broken tiles • Unblock u-bends in sinks 	<p>Key Skills:</p> <ul style="list-style-type: none"> • Market research • Product design • 2 point perspective • Woodworking skills to create timber product