

DT Long Term Plan

2023-2024



	Autumn 1 / Autumn 2	Spring1 / Spring 2	Summer1 / Summer2
<u>Year One</u>	<u>To design, make and evaluate a healthy meal.</u> <ul style="list-style-type: none"> - use the basic principles of a healthy and varied diet to prepare dishes - understand where food comes from. 	<u>Build a structure and explore how the structure can be made stiffer, stronger and more stable.</u> <p><u>Design</u></p> <ul style="list-style-type: none"> - design purposeful, functional, appealing products for themselves and other users based on design criteria -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p><u>Make</u></p>	<u>To design and make a picture with a moveable mechanism.</u> <p><u>Design</u></p> <ul style="list-style-type: none"> - design purposeful, functional, appealing products for themselves and other users based on design criteria -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p><u>Make</u></p>

		<ul style="list-style-type: none"> -select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p><u>Evaluate</u></p> <ul style="list-style-type: none"> -explore and evaluate a range of existing products -evaluate their ideas and products against design criteria Technical knowledge -build structures, exploring how they can be made stronger, stiffer and more stable -explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products. 	<ul style="list-style-type: none"> -select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p><u>Evaluate</u></p> <ul style="list-style-type: none"> -explore and evaluate a range of existing products -evaluate their ideas and products against design criteria Technical knowledge -build structures, exploring how they can be made stronger, stiffer and more stable -explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
<u>Year Two</u>	<p><u>Design and make - Models of the types of buildings burned in the GFNG</u></p> <p><u>Design</u></p> <ul style="list-style-type: none"> - design purposeful, functional, appealing products for themselves and other users based on design criteria -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p><u>Make</u></p> <ul style="list-style-type: none"> -select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p><u>Evaluate</u></p> <ul style="list-style-type: none"> -explore and evaluate a range of existing products 	<p><u>Food technology - savoury dishes</u></p> <ul style="list-style-type: none"> - use the basic principles of a healthy and varied diet to prepare dishes - understand where food comes from. -select from and use a wide range of ingredients, according to their characteristics 	<p><u>Design and make - Textiles, sewing.</u></p> <p><u>Design</u></p> <ul style="list-style-type: none"> - design purposeful, functional, appealing products for themselves and other users based on design criteria -generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology <p><u>Make</u></p> <ul style="list-style-type: none"> -select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] -select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics <p><u>Evaluate</u></p> <ul style="list-style-type: none"> -explore and evaluate a range of existing products -evaluate their ideas and products against design criteria Technical knowledge

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<u>Year Three</u>	<p><u>Understand and apply the principles of a healthy and varied diet</u></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 -understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. 	<p><u>Textile Design – (use of variety of materials and techniques)</u></p> <p style="text-align: center;"><u>Design</u></p> <ul style="list-style-type: none"> -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 -generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p style="text-align: center;"><u>Make</u></p> <ul style="list-style-type: none"> -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, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities <p style="text-align: center;"><u>Evaluate</u></p> <ul style="list-style-type: none"> -investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work 	<p><u>Understand and use mechanical systems in their products</u></p> <p><u>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</u></p> <p style="text-align: center;"><u>Design</u></p> <ul style="list-style-type: none"> -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 -generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design <p style="text-align: center;"><u>Make</u></p> <ul style="list-style-type: none"> -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, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities <p style="text-align: center;"><u>Evaluate</u></p> <ul style="list-style-type: none"> -investigate and analyse a range of existing products

		<p>-understand how key events and individuals in design and technology have helped shape the world Technical knowledge</p> <p>-apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>-understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p> <p>-understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>-apply their understanding of computing to program, monitor and control their products.</p>	<p>-evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>-understand how key events and individuals in design and technology have helped shape the world Technical knowledge</p> <p>-apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <p>-understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</p> <p>-understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</p> <p>-apply their understanding of computing to program, monitor and control their products.</p>
<u>Year Four</u>	<p><u>Prepare and cook a variety of dishes.</u></p> <p>-understand and apply the principles of a healthy and varied diet</p> <p>-prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>-understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p><u>Understand and use electrical systems in their products.</u></p> <p><u>Design</u></p> <p>-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</p> <p>-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p><u>Make</u></p> <p>-select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>-select from and use a wider range of materials and components, including construction materials, textiles</p>	<p><u>Textiles.</u></p> <p><u>Design</u></p> <p>-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</p> <p>-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p><u>Make</u></p> <p>-select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>-select from and use a wider range of materials and components, including construction materials,</p>

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<u>Year Five</u>	<p><u>Textile Design - (use of variety of materials and techniques)</u></p> <p><u>Design and make a purse or bag for an Anglo Saxon to keep their treasure in.</u></p> <p><u>Design</u></p> <ul style="list-style-type: none"> -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 	<p><u>Research foods popular in NY and create a deli menu.</u></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 -understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed. 	<p><u>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</u></p> <p><u>Design</u></p> <ul style="list-style-type: none"> -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 -generate, develop, model and communicate their ideas through discussion, annotated sketches,

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Year Six	<p><u>Understand and use electrical systems in their products.</u></p> <p><u>Design</u></p> <p>-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</p> <p>-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p><u>Make</u></p> <p>-select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>-select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p><u>Evaluate</u></p> <p>-investigate and analyse a range of existing products</p> <p>-evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p>	<p><u>Prepare and cook a variety of dishes.</u></p> <p>-understand and apply the principles of a healthy and varied diet</p> <p>-prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</p> <p>-understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p><u>Textiles</u></p> <p>-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</p> <p>-generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p><u>Make</u></p> <p>-select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</p> <p>-select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities</p> <p><u>Evaluate</u></p> <p>-investigate and analyse a range of existing products</p> <p>-evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>-understand how key events and individuals in design and technology have helped shape the world</p> <p>Technical knowledge</p>

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