



DT Medium Term Plan 2019-20

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	<p>ELG – Exploring and using media and materials</p> <p>Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> <p>ELG – Being imaginative</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.</p>					
Year 1		<p>Cooking</p> <ul style="list-style-type: none"> -To design purposeful, functional, appealing products for themselves and other users based on design criteria. -To generate, develop, model and communicate their ideas through talking, drawing, templates, mock- 		<p>Design a shelter for an animal</p> <ul style="list-style-type: none"> -To design purposeful, functional, appealing products for themselves and other users based on design criteria. -To generate, develop, model and communicate their ideas through talking, drawing, templates, mock- 		<p>Design a weather instrument (wind/rain)</p> <ul style="list-style-type: none"> -To design purposeful, functional, appealing products for themselves and other users based on design criteria. -To generate, develop, model and communicate their ideas



		<p>ups and, where appropriate, information and communication technology.</p> <ul style="list-style-type: none">-To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].-To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.-To explore and evaluate a range of existing products.-To evaluate their ideas and		<p>ups and, where appropriate, information and communication technology.</p> <ul style="list-style-type: none">-To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].-To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.-To explore and evaluate a range of existing products.-To evaluate their ideas and products against design criteria.		<p>through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <ul style="list-style-type: none">-To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].-To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.
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		products against design criteria.		-To build structures, exploring how they can be made stronger, stiffer and more stable.		-To explore and evaluate a range of existing products. -To evaluate their ideas and products against design criteria. -To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Year 2		Cooking -To design purposeful, functional, appealing products for themselves and other users based on design criteria. -To generate, develop, model and communicate		Using Mechanisms -To design purposeful, functional, appealing products for themselves and other users based on design criteria. -To generate, develop, model and communicate their ideas		Design something useful for the seaside -To design purposeful, functional, appealing products for themselves and other users based on design criteria.



		<p>their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <ul style="list-style-type: none">-To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].-To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.-To explore and evaluate a range		<p>through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <ul style="list-style-type: none">-To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].-To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.-To explore and evaluate a range of existing products.-To evaluate their ideas and		<ul style="list-style-type: none">-To generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.-To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing].-To select from and use a wide range of materials and components, including construction materials, textiles and
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		<p>of existing products. -To evaluate their ideas and products against design criteria.</p>		<p>products against design criteria. -To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>		<p>ingredients, according to their characteristics. -To explore and evaluate a range of existing products. -To evaluate their ideas and products against design criteria. -To build structures, exploring how they can be made stronger, stiffer and more stable. -To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p>
Year 3		Design a shelter for human in the		Cooking -To use research and develop		Design a musical instrument



		<p>stone age/iron age</p> <ul style="list-style-type: none">-To 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.-To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.-To select from and use a wider		<p>design criteria to 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">-To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.-To select from and use a wider range of tools and equipment to perform practical tasks		<ul style="list-style-type: none">-To 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.-To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.-To select from and use a wider
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		<p>range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <ul style="list-style-type: none">-To 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.-To investigate and analyse a range of existing products.-To evaluate their ideas and products against their own design criteria and consider the		<p>[for example, cutting, shaping, joining and finishing], accurately.</p> <ul style="list-style-type: none">-To 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.-To investigate and analyse a range of existing products.-To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.		<p>range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.</p> <ul style="list-style-type: none">-To 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.-To investigate and analyse a range of existing products.-To evaluate their ideas and
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		<p>views of others to improve their work.</p> <p>-To understand how key events and individuals in design and technology have helped shape the world.</p> <p>-To apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p>				<p>products against their own design criteria and consider the views of others to improve their work.</p> <p>-To understand how key events and individuals in design and technology have helped shape the world.</p>
Year 4		<p>-To 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>Cooking</p> <p>-To 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>-To use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular</p>



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		<p>construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <ul style="list-style-type: none">-To investigate and analyse a range of existing products.-To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.-To understand how key events and individuals in design and technology have helped shape the world.-To apply their understanding of how to strengthen, stiffen and reinforce		<p>materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <ul style="list-style-type: none">-To investigate and analyse a range of existing products.-To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.		<p>components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <ul style="list-style-type: none">-To investigate and analyse a range of existing products.-To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.-To understand how key events and individuals in design and technology have helped
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		<p>more complex structures.</p> <ul style="list-style-type: none">-To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].-To understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].-To apply their understanding of computing to program, monitor and control their products.				<p>shape the world.</p> <ul style="list-style-type: none">-To apply their understanding of how to strengthen, stiffen and reinforce more complex structures.-To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].-To understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].-To apply their understanding of computing
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						to program, monitor and control their products.
Year 5		<p>-To 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>-To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces</p>		<p>-To 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>-To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces</p>		<p>Cooking</p> <p>-To 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>-To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams,</p>



		<p>and computer-aided design.</p> <ul style="list-style-type: none">-To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.-To 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.-To investigate and analyse a range of existing products.-To evaluate their ideas and		<p>and computer-aided design.</p> <ul style="list-style-type: none">-To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.-To 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.-To investigate and analyse a range of existing products.-To evaluate their ideas and products against		<p>prototypes, pattern pieces and computer-aided design.</p> <ul style="list-style-type: none">-To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately.-To 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.-To investigate and analyse a range of
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		<p>products against their own design criteria and consider the views of others to improve their work.</p> <ul style="list-style-type: none">-To understand how key events and individuals in design and technology have helped shape the world.-To apply their understanding of how to strengthen, stiffen and reinforce more complex structures.-To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].-To understand and use electrical systems		<p>their own design criteria and consider the views of others to improve their work.</p> <ul style="list-style-type: none">-To understand how key events and individuals in design and technology have helped shape the world.-To apply their understanding of how to strengthen, stiffen and reinforce more complex structures.-To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages].-To understand and use electrical systems in their products [for		<p>existing products.</p> <ul style="list-style-type: none">-To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
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		<p>in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors].</p> <p>-To apply their understanding of computing to program, monitor and control their products.</p>		<p>example, series circuits incorporating switches, bulbs, buzzers and motors].</p> <p>-To apply their understanding of computing to program, monitor and control their products.</p>		
Year 6		<p>-To 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>-To generate, develop, model and communicate their ideas through</p>		<p>-To 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>-To generate, develop, model and communicate their ideas through</p>		<p>Cooking</p> <p>-To 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>-To generate, develop, model and</p>



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