

Long Term Sequence of **Design and Technology**: Reception - Year 6

BIG IDEAS - SUBSTANTIVE KNOWLEDGE					
Cooking and nutrition	Mechanisms (KS1)/ Mechanical systems (KS2)	Structures	Textiles	Electrical Systems (KS2 only)	Digital World (KS2 only)

DISCIPLINARY KNOWLEDGE - DESIGN AND TECHNOLOGY			
<p style="text-align: center;">Design</p> <p>Develop the research, creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.</p>	<p style="text-align: center;">Make</p> <p>Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.</p>	<p style="text-align: center;">Evaluate</p> <p>Critique, evaluate and test their ideas and products and the work of others.</p>	<p style="text-align: center;">Technical Knowledge</p> <p>Encompasses the contextual, historical and technical understanding, required for each strand of the design process.</p>

DT Overview						
EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p style="text-align: center;">Structures Junk modelling</p> <p style="text-align: center;">Textiles Bookmarks</p> <p style="text-align: center;">Cooking and nutrition Baking</p>	<p style="text-align: center;">Textiles Puppets</p> <p style="text-align: center;">Cooking and nutrition Fruit kebabs</p> <p style="text-align: center;">Mechanisms Moving story book</p>	<p style="text-align: center;">Textiles Pouches (London Memorabilia)</p> <p style="text-align: center;">Structures Model beach huts</p> <p style="text-align: center;">Mechanisms Making a moving creature</p>	<p style="text-align: center;">Cooking and nutrition Eating seasonally/ soups</p> <p style="text-align: center;">Structures Model burial tombs</p> <p style="text-align: center;">Mechanical systems Pneumatic toys</p>	<p style="text-align: center;">Digital world Wearable technology (virtual tour guide)</p> <p style="text-align: center;">Textiles Fastenings (phone pouch)</p> <p style="text-align: center;">Electrical systems Torches</p>	<p style="text-align: center;">Mechanical systems Making pop up books</p> <p style="text-align: center;">Digital world Monitoring devices</p> <p style="text-align: center;">Structures Bridges</p>	<p style="text-align: center;">Cooking and nutrition Come dine with me (meal from around the world)</p> <p style="text-align: center;">Electrical systems Steady hand game</p> <p style="text-align: center;">Textiles Waistcoats</p>



NATIONAL CURRICULUM PROGRAMMES OF STUDY

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> ● Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. ● Manipulates materials to achieve a planned effect. ● Constructs with a purpose in mind, using a variety of resources. ● Uses simple tools and techniques competently and appropriately. ● Selects appropriate resources and adapts work where necessary. ● Selects tools and techniques needed to shape, assemble and join materials they are 	<p>Design</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>Make</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>Evaluate</p> <ul style="list-style-type: none"> ● explore and evaluate a range of existing products ● evaluate their ideas and products against design criteria 		<p>Design</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>Make</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>Evaluate</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 ● understand how key events and individuals in design and technology have helped shape the world <p>Technical knowledge</p> <ul style="list-style-type: none"> ● apply their understanding of how to strengthen, stiffen and reinforce more complex structures ● understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] ● understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] ● apply their understanding of computing to program, monitor and control their 			

<p>using.</p>	<p>Technical knowledge</p> <ul style="list-style-type: none">• 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 <p>Cooking and nutrition</p> <ul style="list-style-type: none">• Use basic principles of a healthy and varied diet to prepare dishes• Understand where food comes from.	<p>products</p> <p>Cooking and nutrition</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.
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