

	Year 3	Year 4	Year 5	Year 6
Design Use research and develop criteria to inform the design of innovative, functional, appealing products that re fit for purpose aimed at particular groups or individuals	To research, plan and develop designs for a range of age appropriate products. i.e.	To research, plan and develop designs for a range of age appropriate products. i.e.	To research, plan and develop designs for a range of age appropriate products. i.e.	To research, plan and develop designs for a range of age appropriate products. i.e.
Generate, develop mode and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. (cad)	Use annotated sketches to develop ideas	Use annotated sketches and start to use cross-sectional diagrams to develop ideas CAD?	Use annotated sketches and cross-sectional diagrams to develop ideas Cad?	Use annotated sketches, cross-sectional diagrams and exploded diagrams as appropriate to develop ideas Cad?
Make Select and use a range of tools and equipment to perform practical tasks.	Watch a teacher use a glue gun. Use scissors with accuracy Make holes Use large needles	Explain from watching a teacher how to use a glue gun safely) Use snips	Use a glue gun with help Chose when to use scissors or snips Use hack saws with support Use fine needles	Use a glue gun independently (supervised) Use hack saws independently (supervised)
Select from a wider range of materials and components, including construction materials, textiles and ingredients according to their functional properties and aesthetic qualities	Join in class discussion regarding the selection of select materials and components based on properties and aesthetic qualities	With support select materials and components from a choice with some explanation of why the choice has been made	Select materials with an explanation of why?	Select or suggest alternative materials with an explanation of why?

<p>Evaluate</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>Evaluate products? What!?</p> <p>Understand basic mechanisms causing movement, talk about materials used, construction and functionality</p> <p>Talk about (with questioning) how well their product meets a design and how it could be improved /if they made again</p>	<p>Evaluate products? What!?</p> <p>Explain basic mechanisms causing movement, talk about materials used, construction and functionality Identifying main strengths and weaknesses of a product.</p> <p>Explain how well a product meets a design and how well their product meets a design and how it could be improved/if they made it again</p>	<p>Evaluate products? What!?</p> <p>Understand a range mechanisms causing movement, talk about materials used, construction and functionality Identifying a strengths and weaknesses of a product and suggesting how these could be improved.</p> <p>With guidance provide thoughtful and constructive feedback on products of other children</p>	<p>Evaluate products? What!?</p> <p>Explain a range of mechanisms causing movement, talk about materials used, construction and functionality</p> <p>Produce a written critiusue identifying strengths and weaknesses, making recommendations for improvement .</p> <p>Provide thoughtful and constructive feedback on products of other children</p>
<p>Understand how key events and individuals in design and technology have helped shape the world</p>	<p>To have learnt about how a key event or individual in design and technology has helped shape the world.</p>	<p>To be able to talk about two key events or individuals in design and technology who have helped shape the world.</p>	<p>To be able to talk about three key events or individuals in design and technology who have helped shape the world</p>	<p>To be able to explain the work of three key events or individuals in design and technology how they have helped shape the world</p>
<p>Technical knowledge</p> <p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p>	<p>Use plaiting, weaving to strengthen</p>	<p>Use corner reinforcements and edging strips</p>	<p>Start to identify when strengthening may be needed.</p>	<p>Decide when to use i.e use plaiting or weaving to strengthen, Use edging strips</p>

<p>Understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed</p>	<p>To understand seasonality</p> <p>To start to be able to talk about foods that are grown and reared on farms and those that are caught in seas and rivers (or wild). To know that some foods are processed in factories</p>	<p>To start to be able to talk seasonality and ingredients;</p> <p>i.e why we find unseasonal products in shops. The benefits to producing nations and the effects of transporting these.</p> <p>how the how butter and cheese are made</p> <p>To know that some fish are line caught and some trawelled to understand the difference between intensive, free-range and organic farming. To know what 'processed' food means and explore some of the processes of production.</p>	<p>To have a developed understanding of seasonality and ingredients;</p> <p>Why we find unseasonal products in shops. The benefits to producing nations and the effects of transporting these.</p> <p>To be able to explain how butter and cheese are made</p> <p>To talk about the difference between fish are line caught and some trawelled to understand the difference between intensive, free-range and organic farming. To know what 'processed' food means and explore some of the processes of production</p>	<p>To be able to explain seasonality and ingredients;</p> <p>Why we find unseasonal products in shops. The benefits to producing nations and the effects of transporting these.</p> <p>To be able to explain how butter and cheese are made</p> <p>To talk about the difference between fish are line caught and some trawelled to understand the difference between intensive, free-range and organic farming. To know what 'processed' food means and explore some of the processes of production</p>
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Understand and use mechanical systems in their products i.e gears, pulleys, cams, levers and linkages	To use levers and linkages effectively in their designs	With support to use gears, pulleys and/or cams in designs.	To use gears, pulleys and/or cams in designs. With support use hydraulics and pneumatics	To use pulleys and/or cams in designs Use hydraulics and pneumatics
Understand and use mechanical systems in their products (series circuits incorporating switches, bulbs, buzzers and motors)	Use a simple circuit with a switch for a light.	Use a simple circuit with a switch with lights, buzzers and motors. Use a trigger as a switch		
Apply their understanding of computing to programme, monitor and control their products				
Cooking Understand the principles of a healthy and varied diet	Start to be able to explain an 'Eatwell plate'	Explain the types of foods (Fruit and veg, dairy products) an 'Eatwell' plate	Explain the types of foods (carbohydrate, protein) on a 'Eatwell plate'	Apply the concept of an Eatwell plate to the meals throughout a day. Be able to talk about the some of the consequences of a poor diet.
Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques	To know the difference between baking, boiling, steaming, frying deep and shallow and stir-frying To have experienced these cooking techniques	To know the difference between baking, boiling, steaming and stir-frying To have experienced these cooking techniques And talk about which methods are used for different types of food.	To have experienced a range of cooking techniques and start to be able to explain why some are healthier than others.	To have experienced a range of cooking techniques and be confident in explaining why some are healthier than others.