

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	KS1 National Curriculum <i>design purposeful, functional, appealing products for themselves and other users based on design criteria</i> <i>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</i> <i>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]</i> <i>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</i> <i>explore and evaluate a range of existing products</i>		KS2 National Curriculum <i>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</i> <i>generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</i> <i>select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately</i> <i>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</i> <i>investigate and analyse a range of existing products</i> <i>evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</i> <i>understand how key events and individuals in design and technology have helped shape the world</i> <i>apply their understanding of how to strengthen, stiffen and reinforce more complex structures</i> <i>understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]</i> <i>understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]</i>			

<p><i>evaluate their ideas and products against design criteria</i></p> <p><i>build structures, exploring how they can be made stronger, stiffer and more stable</i></p> <p><i>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</i></p> <p><i>use the basic principles of a healthy and varied diet to prepare dishes</i></p> <p><i>understand where food comes from</i></p>	<p><i>apply their understanding of computing to program, monitor and control their products.</i></p> <p><i>understand and apply the principles of a healthy and varied diet</i></p> <p><i>prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques</i></p> <p><i>understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed</i></p>
---	---



	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
M	<p>Children can:</p> <p>Planning with support, follow a simple plan or recipe</p>	<p>Children can:</p> <p>Planning with support, follow a simple plan or recipe</p>	<p>Children can:</p> <p>Plan with growing confidence, carefully select from a range of tools and equipment, explaining their choices</p>	<p>Children can:</p> <p>Plan with growing confidence, carefully select from a range of tools and equipment, explaining their choices</p>	<p>Children can:</p> <p>Plan independently by suggesting what to do next</p>	<p>Children can:</p> <p>Plan independently plan by suggesting what to do next</p> <p>Select from a wide range of tools and equipment, explaining their choices (Pies</p>

A K E	begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer;	begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer;	Select from a range of materials according to their functional properties and aesthetic qualities; (Sewing)	Select from a range of materials and components according to their functional properties and aesthetic qualities (CAMS)	Select from a wide range of tools and equipment, explaining their choices (Bread+soup)	+ fairground rides)
	select from a range of materials, textiles and components according to their characteristics	select from a range of materials, textiles and components according to their characteristics	Follow a recipe/method in a systematic order. (Pizza + Sewing)	Follow a recipe/method in a systematic order (CAMS)	select from a range of materials according to their functional properties and aesthetic qualities (Sewing)	Select from a range of materials and components according to their functional properties and aesthetic qualities (Fairground rides)
	Practical skills and techniques	Practical skills and techniques				Create step-by-step plans as a guide to making (Fairground rides and pies)
	learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures;	learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures;	Learn to use a range of tools and equipment safely. Learn to follow hygiene procedures (Pizza)	Use a range of tools and equipment safely. Reinforce knowledge of hygiene procedures (Biscuits)	Create step-by-step plans as a guide to making (Sewing + bread+soup)	Learn to use a range of tools and equipment safely and appropriately and follow hygiene procedures (Pies)
	use a range of materials and components, including textiles and food ingredients;	use a range of materials and components, including textiles and food ingredients;	With growing independence, measure and mark out to the nearest cm and millimetre (Pizza)	Use a wider range of materials and components, including construction	Learn to use a range of tools and equipment safely and appropriately and follow hygiene procedures (Bread+soup)	Independently take exact measurements and mark out, to within 1 millimetre/gram (Fairground rides and pies)

	<p>with help, measure and mark out;</p> <p>cut, shape and score materials with some accuracy;</p> <p>assemble, join and combine materials, components or ingredients;</p> <p>demonstrate how to cut, shape and join fabric to make a simple product;</p> <p>manipulate fabrics in simple ways to create the desired effect;</p> <p>use a basic running stitch;</p> <p>cut, peel and grate ingredients, including measuring and</p>	<p>with help, measure and mark out;</p> <p>cut, shape and score materials with some accuracy;</p> <p>assemble, join and combine materials, components or ingredients;</p> <p>demonstrate how to cut, shape and join fabric to make a simple product;</p> <p>manipulate fabrics in simple ways to create the desired effect;</p> <p>use a basic running stitch;</p> <p>cut, peel and grate ingredients, including measuring and</p>	<p>Cut and shape materials with some degree of accuracy; (Pizza + Sewing)</p> <p>Assemble, join and combine materials with some degree of accuracy; (Pizza + Sewing)</p> <p>Demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product; (Sewing)</p> <p>Join fabrics together using simple stitches such as running stitch and back stitch (Sewing)</p>	<p>materials and mechanical components (CAMS)</p> <p>With growing independence, measure and mark out to the nearest cm and millimetre (Biscuits and CAMS)</p> <p>Cut, shape and score materials with some degree of accuracy (Biscuits and CAMS)</p>	<p>Independently take exact measurements and mark out, to within 1 millimetre/gram (Bread+soup)</p> <p>Cut a range of materials with precision and accuracy (Sewing)</p> <p>Assemble, join and combine materials using a range of techniques such as stitching with accuracy (Sewing)</p> <p>Demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product (Sewing)</p> <p>Join textiles using a greater variety of stitches, such as</p>	<p>and components with accuracy (Fairground rides)</p> <p>Refine the finish using techniques to improve the appearance of their product, such as sanding (Fairground rides)</p>
--	--	--	---	--	--	---

	<p>weighing ingredients using measuring cups;</p> <p>begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.</p>	<p>weighing ingredients using measuring cups;</p> <p>begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.</p>			<p>backstitch, whip stitch, blanket stitch (Sewing)</p> <p>Refine the finish using techniques to improve the appearance of their product, such as a more precise scissor cut after roughly cutting out a shape (Sewing)</p>	
--	--	--	--	--	---	--

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
E V A L U A T E	<p>Children can: explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations;</p> <p>explain positives and things to improve for existing products;</p> <p>explore what materials products are made from;</p> <p>talk about their design ideas and what they are making;</p> <p>as they work, start to identify strengths and possible changes they might make to refine their existing design;</p>	<p>Children can: explore and evaluate existing products mainly through discussions, comparisons and simple written evaluations;</p> <p>explain positives and things to improve for existing products;</p> <p>explore what materials products are made from;</p> <p>talk about their design ideas and what they are making;</p> <p>as they work, start to identify strengths and possible changes they might make to refine their existing design;</p>	<p>Children can: Explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose (Sewing)</p> <p>Explore materials/ingredients and consider the effectiveness for a specific purpose (Sewing + Pizza)</p> <p>Consider their design criteria as they make progress and are willing to alter their plans (Sewing + Pizza)</p> <p>Evaluate their product against their original design criteria (Sewing + Pizza)</p>	<p>Children can: Explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose (CAMS)</p> <p>Explore what materials/ingredients products are made from and suggest reasons for this (Biscuits and CAMS)</p> <p>Consider their design criteria as they make progress and are willing to alter their plans, sometimes considering the views of others if this helps them to improve their product (Biscuits and CAMS)</p> <p>Evaluate their product</p>	<p>Children can: Complete detailed competitor analysis of other products on the market</p> <p>Critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make (Sewing)</p> <p>Evaluate their ideas and products against the original design criteria, making changes as needed.</p>	<p>Children can: Complete detailed competitor analysis of other products on the market;</p> <p>Critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make (Fairground rides)</p> <p>Evaluate their ideas and products against the original design criteria, making changes as needed.</p>

	<p>evaluate their products and ideas against their simple design criteria;</p> <p>start to understand that the iterative process sometimes involves repeating different stages of the process.</p>	<p>evaluate their products and ideas against their simple design criteria;</p> <p>start to understand that the iterative process sometimes involves repeating different stages of the process.</p>		<p>against their original design criteria (Biscuits and CAMS)</p> <p>Evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.</p>		
--	--	--	--	--	--	--

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
--	--------	--------	--------	--------	--------	--------

T E C H N I C A L	Children can: build simple structures, exploring how they can be made stronger, stiffer and more stable	Children can: build simple structures, exploring how they can be made stronger, stiffer and more stable	Children can: Understand that materials have both functional properties and aesthetic qualities	Children can: Understand that materials have both functional properties and aesthetic qualities	Children can: Understand that materials have both functional properties and aesthetic qualities	Children can: Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products
	talk about and start to understand the simple working characteristics of materials and components	talk about and start to understand the simple working characteristics of materials and components		Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products (CAMS)		Understand and demonstrate that mechanical and electrical systems have an input, process and output (Fairground rides)
	explore and create products using mechanisms, such as levers, sliders and wheels.	explore and create products using mechanisms, such as levers, sliders and wheels.		Explain how mechanical systems such as CAMS, levers and linkages create movement (CAMS)		Explain how mechanical systems, create movement and use mechanical systems in their products (Fairground rides)
				Use mechanical systems in their products (CAMS)		Apply their understanding of computing to program, monitor and control a product (Fairground rides)

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
C O O K I N G & N U T	<p>Children can: explain where in the world different foods originate from</p> <p>understand that all food comes from plants or animals</p> <p>understand that food has to be farmed, grown elsewhere (e.g. home) or caught</p> <p>name and sort foods into the five groups in the Eatwell Guide</p> <p>understand that everyone should eat at least five portions</p>	<p>Children can: explain where in the world different foods originate from</p> <p>understand that all food comes from plants or animals</p> <p>understand that food has to be farmed, grown elsewhere (e.g. home) or caught</p> <p>name and sort foods into the five groups in the Eatwell Guide</p> <p>understand that everyone should eat at least five</p>	<p>Children can: start to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world</p> <p>understand how to prepare and cook a savoury dish</p> <p>with support, use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob oven</p> <p>use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking using appropriate cooking</p>	<p>Children can: understand how to prepare and cook a variety of dishes safely and hygienically</p> <p>with support, use a heat source to cook ingredients showing awareness of the need to control the temperature of the oven</p> <p>use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking using appropriate cooking utensils</p> <p>explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the</p>	<p>Children can: know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world</p> <p>With growing confidence, use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob and/or oven</p> <p>understand about seasonality, how this may affect the food availability and plan recipes according to seasonality</p> <p>understand that food is processed into ingredients that can be eaten or used in cooking</p> <p>demonstrate how to prepare and cook a variety of</p>	<p>Children can: know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world</p> <p>understand about seasonality, how this may affect the food availability and plan recipes according to seasonality</p> <p>understand that food is processed into ingredients that can be eaten or used in cooking</p> <p>demonstrate how to prepare and cook a variety of</p>

R I T I O N	of fruit and vegetables every day and start to explain why	portions of fruit and vegetables every day and start to explain why	utensils	Eatwell Guide and be able to apply these principles when planning and cooking dishes	understand that food is processed into ingredients that can be eaten or used in cooking	predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source
	use what they know about the Eatwell Guide to design and prepare dishes.	use what they know about the Eatwell Guide to design and prepare dishes.	explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide and be able to apply these principles when planning and cooking dishes	Measure and weigh ingredients to the nearest gram and millilitre	demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically	demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling
			understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body	Start to independently follow a recipe.	demonstrate how to use a range of cooking techniques, such as griddling, grilling, frying and boiling	explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes
			measure and weigh ingredients to the nearest gram and millilitre		explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes	adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma;
			start to independently follow a recipe; start to understand seasonality.		adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste,	alter methods, cooking times and/or temperatures;

					<p>texture and aroma;</p> <p>alter methods, cooking times and/or temperatures;</p> <p>measure accurately and calculate ratios of ingredients to scale up or down from a recipe;</p> <p>Independently follow a recipe.</p>	<p>measure accurately and calculate ratios of ingredients to scale up or down from a recipe;</p> <p>independently follow a recipe.</p>
--	--	--	--	--	---	--

	Y1	Y2	Y3	Y4	Y5	Y6
			<p>Textiles (sewing) - phone cases</p> <p>Cooking - Pizza making</p>	<p>Mechanical systems - CAMS</p> <p>Cooking - biscuits</p>	<p>Textiles (sewing) - stuffed creatures</p> <p>Cooking - Bread and soup making</p>	<p>Mechanical systems - Fairground rides</p> <p>Cooking - pies</p>