

	Nursery and Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
	<p><b>EYFS Children ~</b></p> <p>understand that media can be combined to create new effects.</p> <p>construct with a purpose in mind, using a variety of resources.</p> <p>use simple tools and techniques competently and appropriately.</p> <p>select appropriate resources and adapt work where necessary.</p>	<p><b>KS1 National Curriculum Children ~</b></p> <p>design purposeful, functional, appealing products for themselves and other users based on design criteria.</p> <p>generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.</p> <p>select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] .</p> <p>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p>		<p><b>KS2 National Curriculum Children ~</b></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>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>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>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>select tools and techniques needed to shape, assemble and join materials they are using.</p> <p>safely use and explore a variety of materials, tools and techniques, experimenting with design, form and function.</p> <p>create simple representations of objects.</p> <p>use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p>	<p>explore and evaluate a range of existing products.</p> <p>evaluate their ideas and products against design criteria.</p> <p>build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.</p> <p>use the basic principles of a healthy and varied diet to prepare dishes.</p> <p>understand where food comes from.</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>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>
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	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
M A K E	<p><b>Children can:</b></p> <p>explore collections of materials with similar and/or different properties.</p> <p>use a variety of tools and materials to make models.</p> <p>explore different materials freely, develop their ideas about how to use them and what to make.</p> <p>develop their own ideas and then decide which materials to use to express them.</p>	<p><b>Children can:</b></p> <p>follow a simple plan or recipe.</p> <p>begin to select from a range of hand tools and equipment ( such as scissors, graters, zesters, safe knives, juicer).</p> <p>select from a range of materials, textiles and components according to their characteristics.</p>	<p><b>Children can:</b></p> <p><b>independently</b> follow a simple plan or recipe.</p> <p>select from a range of hand tools and equipment (such as scissors, graters, zesters, safe knives, juicer) <b>and use them correctly.</b></p> <p>select from a range of materials, textiles and components according to their characteristics, <b>discussing why they are appropriate for the task.</b></p> <p><b>Practical skills and techniques</b></p>	<p><b>Children can:</b></p> <p>Plan with growing confidence, carefully select from a range of tools and equipment, explaining their choices</p> <p>Select from a range of materials according to their functional properties and aesthetic qualities; <b>(Sewing)</b></p> <p>Follow a recipe/method in a systematic order. <b>(Pizza + Sewing)</b></p> <p>Learn to use a range of tools</p>	<p><b>Children can:</b></p> <p>Plan with growing confidence, carefully select from a range of tools and equipment, explaining their choices</p> <p>Select from a range of materials and components according to their functional properties and aesthetic qualities <b>(CAMS)</b></p>	<p><b>Children can:</b></p> <p>Plan independently by suggesting what to do next</p> <p>Select from a wide range of tools and equipment, explaining their choices <b>(Bread+soup)</b></p> <p>select from a range of materials according to their functional properties and aesthetic qualities <b>(Sewing)</b></p>	<p><b>Children can:</b></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 <b>(Pies + fairground rides)</b></p> <p>Select from a range of materials and components according to their functional properties and aesthetic qualities <b>(Fairground rides)</b></p> <p>Create step-by-step plans as a guide to making <b>(Fairground rides and pies)</b></p> <p>Learn to use a range of tools and equipment safely</p>

	<p>join different materials and explore different textures.</p> <p>use one-handed tools and equipment, for example, making snips in paper with scissors;</p> <p>develop their fine motor skills so that they can use a range of tools competently, safely and confidently;</p> <p>make with wood, using the appropriate tools;</p> <p>use measuring cups accurately to make playdoh, salt dough and bread.</p>	<p><b>Practical skills and techniques</b></p> <p>learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures.</p> <p>follow a pattern / template to create a model.</p> <p>learn different techniques to assemble, join and combine materials and components.</p> <p>learn how to effectively cut different materials to create a model or picture (such as a whole class mixed media collage), manipulating fabrics in simple ways.</p>	<p>learn to use hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures.</p> <p><b>measure and mark out items to make a model using the most appropriate resources (ruler, tape measure etc).</b></p> <p>revisit, revise and develop techniques from Year 1.</p> <p><b>skilfully demonstrate how to cut, shape and join fabric to make a simple product.</b></p> <p><b>manipulate fabrics</b></p>	<p>and equipment safely. Learn to follow hygiene procedures (Pizza)</p> <p>With growing independence, measure and mark out to the nearest cm and millimetre (Pizza)</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</p>	<p>Follow a recipe/method in a systematic order (CAMS)</p> <p>Use a range of tools and equipment safely. Reinforce knowledge of hygiene procedures (Biscuits)</p> <p>Use a wider range of materials and components, including construction 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>Create step-by-step plans as a guide to making (Sewing + bread+soup)</p> <p>Learn to use a range of tools and equipment safely and appropriately and follow hygiene procedures (Bread+soup)</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</p>	<p>and appropriately and follow hygiene procedures (Pies)</p> <p>Independently take exact measurements and mark out, to within 1 millimetre/gram (Fairground rides and pies)</p> <p>Use a full range of materials and components, including construction materials and mechanical components (Fairground rides)</p> <p>Cut a range of materials with precision and accuracy (Fairground rides)</p> <p>Shape and score materials with precision and accuracy;</p> <p>Assemble, join and combine materials 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>
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		<p>begin to cut, peel and grate ingredients, including measuring and weighing using measuring cups;</p> <p>contemplate and consider finishing techniques and simple decorations.</p>	<p><b>in simple ways to create the desired effect, discussing the most effective technique.</b></p> <p><b>use a basic running stitch.</b></p> <p><b>skilfully</b> cut, peel and grate ingredients, including measuring and weighing using measuring cups.</p> <p><b>use simple finishing techniques</b> to improve the appearance of their product, such as adding simple decorations.</p>	<p>such as running stitch and back stitch (<b>Sewing</b>)</p>	<p>Cut, shape and score materials with some degree of accuracy (<b>Biscuits and CAMS</b>)</p>	<p>allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product (<b>Sewing</b>)</p> <p>Join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch (<b>Sewing</b>)</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 (<b>Sewing</b>)</p>	
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	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>E V A L U A T E</b>	<p><b>Children can:</b></p> <p>talk about the differences between materials and changes they notice.</p> <p>talk about what they see, using a widening vocabulary.</p> <p>explore, use and refine a variety of artistic effects to express their ideas.</p> <p>return to and build on their previous learning, refining ideas and developing their ability to represent them.</p> <p>through woodwork, think creatively and critically, solve problems and reflect.</p> <p>create collaboratively, sharing ideas, resources and skills.</p>	<p><b>Children can:</b></p> <p>evaluate existing products through class and group discussions.</p> <p>discuss what materials products are made from.</p>	<p><b>Children can:</b></p> <p>explore and evaluate existing products through discussions, comparisons and simple <b>written evaluations, designing their own format.</b></p> <p><b>discuss and explain positives and areas to improve for existing products.</b></p> <p>discuss and explore what products</p>	<p><b>Children can:</b></p> <p>Explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose <i>(Sewing)</i></p> <p>Explore materials/ingredients and consider the effectiveness for a specific purpose <i>(Sewing + Pizza)</i></p> <p>Consider their design criteria as they make progress and are willing to alter their plans <i>(Sewing + Pizza)</i></p> <p>Evaluate their product against their original design criteria <i>(Sewing + Pizza)</i></p>	<p><b>Children can:</b></p> <p>Explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose <i>(CAMS)</i></p> <p>Explore what materials/ingredients products are made from and suggest reasons for this <i>(Biscuits and CAMS)</i></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 <i>(Biscuits and CAMS)</i></p>	<p><b>Children can:</b></p> <p>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 <i>(Sewing)</i></p> <p>Evaluate their ideas and products against the original design criteria, making changes as needed.</p>	<p><b>Children can:</b></p> <p>Complete competitor analysis of other products on the market</p> <p>Critically evaluate the quality of design and fitness for purpose as they make <i>(rides)</i></p> <p>Evaluate and present their own criteria for change</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>evaluate their products and ideas against their simple design criteria.</p> <p>discuss how the improvement process sometimes involves repeating different stages of the process.</p>	<p>are made from.</p> <p>talk about their design ideas and what they are making;</p> <p>as they work, start to identify and record strengths and possible changes they might make to refine their existing design. <b>Work collaboratively with peers to review, critique and provide feedback.</b></p> <p>evaluate their products and ideas against their design criteria.</p> <p><b>discuss and start to understand</b> that the improvement process sometimes involves repeating different stages of the process.</p>		<p>Evaluate their product against their original design criteria (<b>Biscuits and CAMS</b>)</p> <p>Evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.</p>		
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	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
T E C H N I C A L	<p><b>Children can:</b></p> <p>explore how things work.</p> <p>program a bee-bot and successfully interact with the SMART board and ipads.</p> <p>develop their own ideas and then decide which materials to use to express them.</p> <p>choose the most appropriate resources to carry out their own plan.</p>	<p><b>Children can:</b></p> <p>through a problem solving activity, design and make a model that is fit for purpose (such as a den for an animal).</p> <p>talk about and start to understand the simple working characteristics of materials and components</p> <p>explore and create products using a slider mechanism.</p>	<p><b>Children can:</b></p> <p><b>build simple structures, exploring how they can be made stronger, stiffer and more stable.</b></p> <p>talk about and start to understand the simple working characteristics of materials and components</p> <p>explore and create products using mechanisms, such as <b>axels and wheels.</b></p>	<p><b>Children can:</b></p> <p>Understand that materials have both functional properties and aesthetic qualities</p>	<p><b>Children can:</b></p> <p>Understand that materials have both functional properties and aesthetic qualities</p> <p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products <b>(CAMS)</b></p> <p>Explain how mechanical systems such as CAMS, levers and linkages create movement <b>(CAMS)</b></p> <p>Use mechanical systems in their products <b>(CAMS)</b></p>	<p><b>Children can:</b></p> <p>Understand that materials have both functional properties and aesthetic qualities</p>	<p><b>Children can:</b></p> <p>Apply understanding to strengthen, and reinforce complex structures in order to create useful characteristics of products</p> <p>Understand and demonstrate the mechanical and electrical systems of an input, process and output <b>(Fairground rides)</b></p> <p>Explain how mechanical systems create movement and use mechanical systems in their products <b>(Fairground rides)</b></p>



								Apply their understanding of computing to plan, monitor and control a product (Fairground rides)
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	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
C O O K I N G & N U T	<p><b>Children can:</b></p> <p>make healthy choices about food and drink.</p> <p>prepare and cook recipes linked to the relevant topic and area of learning.</p> <p>talk about the different factors that support their overall health and wellbeing including healthy eating.</p>	<p><b>Children can:</b></p> <p>talk about foods that are grown in the United Kingdom.</p> <p>understand that all food comes from plants or animals.</p> <p>name and sort foods into the five groups.</p> <p>understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why.</p>	<p><b>Children can:</b></p> <p>explain <b>where in the world</b> 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 <b>five groups in the Eatwell Guide.</b></p> <p>understand and <b>explain</b> why everyone should <b>eat at least five portions of fruit and vegetables every day, discuss what a</b></p>	<p><b>Children can:</b></p> <p>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,</p>	<p><b>Children can:</b></p> <p>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</p>	<p><b>Children can:</b></p> <p>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 predominantly</p>	<p><b>Children can:</b></p> <p>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 affect the food availability and plan recipes according to seasonal</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 predominantly</p>

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**portion is and make links to a balanced diet.**

use what they know about the Eatwell Guide to design and prepare dishes.

crushing, grating, cutting, kneading and baking using appropriate cooking utensils

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

understand that to be active and healthy, nutritious food and drink are needed to provide energy for the body

measure and weigh ingredients to the nearest gram and millilitre

start to independently follow a recipe;

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

Start to independently follow a recipe.

ingredients that can be eaten or used in cooking

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

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;

adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma;

savoury dishes safely and hygienically including, where appropriate, the use of a heat source

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

adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma;

alter methods, cooking times and/or temperatures;

measure accurately a

				start to understand seasonality.		alter methods, cooking times and/or temperatures;  measure accurately and calculate ratios of ingredients to scale up or down from a recipe;  Independently follow a recipe.	calculate ratios of ingredients to scale up or down from a recipe.  independently follow recipe.
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**Suggested learning, provocations and exploration ~**

EYFS	Y1	Y2	Y3	Y4	Y5	Y6
<p>Traditional tales with a twist ~ opportunities for cooking, designing and construction.</p> <p>Group and individual woodwork projects.</p> <p>Small groups working in the school kitchen, learning about the different appliances, finding out where the food comes from and how it is stored, observing and helping with</p>	<p>Taste different variety of apples grown in the UK and make apple juice.</p> <p>Cook with different apples.</p> <p>Group and class collage using a range of media.</p> <p>Moving puppets.</p>	<p>Prepare and taste fruit and vegetables that are not grown in the United Kingdom.</p> <p>Plan a 'dragons den' activity where children present their inventions to each other (Junior Dragons Den).</p> <p>Design a model with axles and wheels.</p>	<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>

<p>the preparation of the lunches.</p>	<p>Group woodwork sessions, building on skills from Reception.</p> <p>Small groups working in the school kitchen, learning about the different appliances, finding out where the food comes from and how it is stored, observing and helping with the preparation of the lunches.</p>	<p>Design and make a healthy lunchbox with all food groups considered.</p> <p>Group woodwork sessions, building on skills from Reception and Year 1.</p> <p>Small groups working in the school kitchen, learning about the different appliances, finding out where the food comes from and how it is stored, observing and helping with the preparation of the lunches.</p>				
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