

Design and Technology Skills Progression

Nursery				
Design	Make	Evaluate	Cooking	Nutrition
<ul style="list-style-type: none"> · Develop their own ideas and then decide which materials to use to express them. 	<ul style="list-style-type: none"> · Explore different materials freely, in order to develop their ideas about how to use them and what to make. · Join different materials and explore different textures. 			<ul style="list-style-type: none"> · Make healthy choices about food, drink, activity and toothbrushing.
cut, stick, fix, join, fold, glue, tape				

Reception				
Design	Make	Evaluate	Cooking	Nutrition
<ul style="list-style-type: none"> · Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; 	<ul style="list-style-type: none"> · Explore, use and refine a variety of artistic effects to express their ideas and feelings. · Create collaboratively sharing ideas, resources and skills. · Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function; · Make use of props and materials when role playing characters in narratives and stories. 	<ul style="list-style-type: none"> · Return to and build on their previous learning, refining ideas and developing their ability to represent them. · Share their creations, explaining the process they have used; 		<ul style="list-style-type: none"> · Know and talk about the different factors that support their overall health and wellbeing: - regular physical activity - healthy eating - tooth brushing - sensible amounts of 'screen time' - having a good sleep routine - being a safe pedestrian.
bend, fold, scrunch, glue, label, fringe, curl, link, hole punch, tape, split pin				

Year 1

Design	Make	Evaluate	Cooking	Nutrition
<ul style="list-style-type: none"> · To think of their own ideas and can explain verbally what they want to do. · To use pictures and words to plan. · To design appealing products for themselves and others. 	<ul style="list-style-type: none"> · To say what they are making and explain the choices they have made. · To select the appropriate adhesive for their design. · To join paper and card in different ways, for example different types of glue, staples and sticky tape. · To use a variety of scissors to cut and shape paper and card, e.g. pinking shears. Use a range of mechanisms- lever, slider, wheel · Select and use a wide range of construction materials in their designs, e.g. art straws, pipe cleaners, cotton reels, buttons, boxes, bottle tops, fabric, etc · Use a template 	<ul style="list-style-type: none"> · To explore existing products and discuss who and what they are for. · To describe how something works and evaluate their own and others' work. 	<p>With close supervision</p> <ul style="list-style-type: none"> · To use simple kitchen tools, such as kitchen scissors, whisk, rolling pin and measuring spoons, to prepare a simple dish. · To mix, stir and combine liquid and dry ingredients · To use hands to rub fat into flour · To crack an egg and beat using a fork · To use hands to shape dough into small balls or shapes · To use biscuit cutters · To observe adults using the hob, oven, toaster and/or microwave · To prepare food for baking e.g. greasing baking tins 	<ul style="list-style-type: none"> · To understand healthy and unhealthy foods and use this knowledge to prepare simple dishes. · To understand the importance of hygiene when preparing food. · To know that food comes from plants or animals.

Vocabulary

planning, investigating, design, evaluate, make, user, purpose, ideas, product, moving, mechanism, slider, assemble, fix, lever, split pin, pivot, wheel, disc, reassemble, fixed, push, cut, draw.

Year 2

Design	Make	Evaluate	Cooking	Nutrition
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<ul style="list-style-type: none"> · To select the tools and material they need explaining why they have chosen them when making structures. · To use pictures, diagrams, models and words to plan. · To design purposeful, functional and appealing products for themselves and others based on design criteria. · To make simple mock-ups. 	<ul style="list-style-type: none"> · To select materials according to their properties. · To join materials in different ways including joining them to strengthen a structure. · To use wheel and axle mechanisms to make something that moves. · To use a template. 	<ul style="list-style-type: none"> · To explore and evaluate existing products. · To evaluate their work against the design criteria. · To suggest improvements to their ideas and product 	<p>With close supervision</p> <ul style="list-style-type: none"> · To use simple kitchen tools, such as kitchen scissors, whisk, rolling pin and measuring spoons, to prepare a simple dish. · To use bridge hold to cut soft and cooked foods using a safety knife · To mix, stir and combine liquid and dry ingredients · To use hands to rub fat into flour · To crack an egg and beat using a fork · With physical guidance, use a small table knife for spreading soft spreads onto bread / pastry · To use hands to shape dough into small balls or shapes · To use biscuit cutters <p>To cream fat and sugar together using a mixing spoon</p> <ul style="list-style-type: none"> · To observe adults using the hob, oven, toaster and/or microwave · To prepare food for baking e.g. greasing baking tins <p>Independently</p> <ul style="list-style-type: none"> · To begin to sieve flour, raising agents and spices together in a bowl · To mix, stir and combine wet and dry ingredients for a dough · To knead and shape dough 	<ul style="list-style-type: none"> · To prepare simple dishes using the basic principles of a healthy and varied diet. · To understand the importance of hygiene when preparing food. · To know that food has to be farmed, grown elsewhere or caught.
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Vocabulary

investigating, planning, design, make, evaluate, user, purpose, ideas, design, criteria, product, function, cream, observe, greasing, combine, stir, knead, bridge hold, sieve

Year 3

Design	Make	Evaluate	Cooking	Nutrition
<ul style="list-style-type: none"> · To create a design that meets a criteria aimed at particular individuals or groups. · To plan the order of creation and select the tools and materials they will need. · To use labelled realistic sketches to describe and design. <p>To research and consider a user's view before designing their product. (Taste)</p> <p>To produce a detailed and annotated plan listing all the ingredients needed (Vegetarian)</p>	<ul style="list-style-type: none"> · To make cuts and holes in materials with increasing accuracy using a range of tools, for example: fabric and paper. · Select a range of materials appropriate for purpose. · To use lever/pulley mechanism. · To apply a range of finishes, including those from art and design. - In sewing, use running stitches and back stitch to join fabric. To make a prototype To use a range of tools and equipment with supervision 	<ul style="list-style-type: none"> · To investigate a range of existing products. · To consider the views of others to improve work. · To know how to check if their design has been successful. <p>To self and peer assess designs, giving constructive feedback</p> <p>To explain how their finished product will be of good quality and how it will appeal to the audience.</p>	<p>With close to moderate supervision</p> <ul style="list-style-type: none"> · To use both the bridge hold and claw grip to cut the same food e.g. onions using a vegetable knife · To begin to peel harder foods · To cut food into evenly sized strips and cubes · To handle hot food safely (using oven gloves and a fish slice etc.) once an adult has removed it from the oven · To observe adults cooking on the hob and putting in and removing food from the oven 	<ul style="list-style-type: none"> · To understand how a variety of ingredients sourced and understand food miles · To prepare simple dishes using the basic principles of a healthy and varied diet. · To understand the importance of hygiene when preparing food. · To know that food has to be farmed, grown elsewhere or caught.

Vocabulary

user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, appealing, back stitch, running stitch, tunic, primitive, seam, hem, claw, bridge, seasonality, hygiene, ingredients

Year 4

Design	Make	Evaluate	Cooking	Nutrition
<ul style="list-style-type: none"> · To research and compare designs to inform their design for a product, based on a given criteria. · To research how materials have been strengthened by shaping and joining, e.g. suspension bridge design, aquaducts etc. · describe the purpose of their products. · To produce and explain their product plan to others. · To be confident to try new and different ideas, materials and techniques. 	<ul style="list-style-type: none"> · To make their product strong, selecting materials and tools. · To select from and use a wide range of materials that can be strengthened by shaping and joining, e.g. levers and linkages. · Select from and use a range of tools and equipment to perform a job, such as cutting, shaping and joining, and am becoming able to explain my choices · test materials and make changes where required. · To apply finishing techniques to their projects showing an awareness of the audience and discuss its aesthetic qualities. - Join fabrics using running stitch and cross stitch - Select the most accurate techniques to decorate textiles 	<ul style="list-style-type: none"> · To investigate a range of existing products. · To consider the views of others to improve work. · To know how to check if their design has been successful. · To understand how key events, such as the Industrial Revolution, impacted on the textile industry and the people that work with it. 		

Vocabulary

evaluating, design brief, design criteria, innovative, prototype, user, purpose, function, prototype, innovative, appealing, planning, annotated sketch, investigating, strengthening

Year 5

Design	Make	Evaluate	Cooking	Nutrition
<ul style="list-style-type: none"> · To research and consider a user's view before designing their product. · To produce a detailed and annotated plan, · To self and peer assess designs, giving constructive feedback. · To explain how their finished product will be of good quality and how it will appeal to the audience. · To make a prototype. · To consider the characteristics of the cam mechanism when designing the moving part of their toy. · To recognise the movement of a mechanism within a toy or model · To understand that a cam will change rotary motion into linear motion · To understand that different shaped cams produce different movements 	<ul style="list-style-type: none"> · To use a range of tools and equipment expertly. · To continually review and improve their product throughout the making process. · To use mechanical systems in products, such as gears, pulleys · Select and explain their choice of ingredients according to the design brief · Select appropriate materials relevant to design brief · Strengthen and reinforce fabrics · To cut out and join with accuracy to ensure a good-quality finish to the product · To test the mechanisms and adjust where necessary. · To use tools for cutting safely and effectively 	<ul style="list-style-type: none"> · To refine and improve their product after testing it. · To evaluate how well their product is finished. · To evaluate their ideas and products against their own design criteria and identify the strengths and areas for improvement in their work. · To understand how key events and individuals in design and technology have helped shape the world. 	<p>With moderate supervision</p> <ul style="list-style-type: none"> · To finely grate or zest foods · To cut food into batons then cubes <p>Independently</p> <ul style="list-style-type: none"> · To use claw grip and bridge hold safely and confidently · To use fingertips to rub fat into flour to make fine breadcrumbs <p>To sieve flour, raising agents and spices together in a bowl</p> <ul style="list-style-type: none"> · To mix, stir and combine wet and dry ingredients for a dough · To knead and shape dough · To use a rolling pin to roll out dough to a specific thickness · To spread food evenly with a coating, paste or glaze · To join pastry by crimping the edges · To dice foods according to the size the recipe requires · To handle hot food safely (using oven gloves and a fish slice etc.) once an adult has removed it from the oven 	<ul style="list-style-type: none"> · To understand the seasonality of food. · To understand the concept of food miles

			. To glaze the pastry using a wash	
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Vocabulary

design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, annotate, prototype, crimping, bridge hold, claw grip, fastening, investigate, strengthen, materials, band, trim, intricate, geometric, shape, assemble, cam, mechanisms, movement, linear motion, rotary motion, pivot, off-centre, axle, force, framework, follower, guide, offset, shaft

Year 6

Design	Make	Evaluate	Cooking	Nutrition
<ul style="list-style-type: none"> · To research and develop their own design criteria to inform the design of innovative, functional and appealing products that are fit for purpose. · To create a design aimed at a specific individual or group. · Considering the proportions of individual components · Create an accurate template 	<ul style="list-style-type: none"> · To be able to cut, shape and join wood, selecting an appropriate join technique using nails, hammer, handsaw, mitre, glue gun, wood glue. · To select from a range of electrical components (switches and bulbs). · To use a finishing technique that involves a number of steps. To join textiles with a combination of back stitch, running stitch and blanket stitch. · To understand the need for a seam allowance. · To use appropriate stitches to decorate textiles. · Creating a 2D stuffed to a 3D · Using applique to attach design to fabric 	<ul style="list-style-type: none"> · To refine and improve their product after testing it. · To evaluate how well their product is finished. · To evaluate their ideas and products against their own design criteria. · To understand how key events and individuals in design and technology have helped shape the world. 		

	. Measure, marking and cutting fabric accurately and independently			
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Vocabulary

function, innovative, design specification, design brief, user, purpose, annotated sketch, research, functional, mock-up, prototype, components, applique, blanket stitch, seam, clamp, saw, timber, dimension, diagram, panel, hinge, hammer, nails, template, g-clamp