



Progression in Design and Technology



Year Group	Early Years	Y1	Y2	Y3	Y4	Y5	Y6
Themes	Year B	Year A	Year B	Year A	Year B	Year A	Year B
Autumn Spring Summer	Changes Diversity Inventions	Journeys Explorers Victory	Changes Diversity Inventions	Journeys Explorers Victory	Changes Diversity Inventions	Journeys Explorers Victory	Changes Diversity Inventions
Topic area		Sliders and levers Preparing fruit and vegetables Freestanding structures Templates and joining techniques	Wheels and axles Preparing fruit and vegetables Templates and joining techniques	Healthy and varied diet Shell structures 2-D shape to 3-D product	Pneumatics Healthy and varied diet Simple circuits and switches	Celebrating culture and seasonality Pulleys or gears Frame Structures	Celebrating culture and seasonality More complex switches and circuits Combining different fabric shapes
Cooking and Nutrition		Understand that all food has to be farmed, grown or caught Use a wider range of cookery techniques to prepare food safely <i>fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core,</i>	Say where some food comes from and give examples of food that is grown. Use simple tools with help to prepare food safely <i>fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing,</i>	Understand seasonality and the advantages of eating seasonal and locally produced food Understand seasonality and the advantages of eating seasonal and locally produced food <i>name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught,</i>	Understand that food has to be grown, farmed or caught in Europe and the wider world Use a wider variety of ingredients and techniques to prepare and combine ingredients safely <i>name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook,</i>	Confidently plan a series of healthy meals based on the principles of a healthy and varied diet <i>ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source,</i>	Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat Select appropriate ingredients and use a wide range of techniques to combine them. <i>ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking</i>

		<p>slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p>	<p>healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p>	<p>frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, sensory evaluations</p>	<p>fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, sensory evaluations</p>	<p>seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble design specification, innovative, research, evaluate, design brief</p>	<p>soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble design specification, innovative, research, evaluate, design brief</p>
<p>Textiles</p>		<p>names of existing products, joining and finishing techniques, tools, fabrics and components template, pattern pieces, mark out, join, decorate, finish features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function</p>	<p>fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces</p>				<p>seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces name of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper design criteria, annotate, design decisions, functionality, innovation, authentic, user, purpose, evaluate, mock-up, prototype</p>

Mechanisms		slider, lever, pivot, slot, bridge/guide card, masking tape, paper fastener, join pull, push, up, down, straight, curve, forwards, backwards design, make, evaluate, user, purpose, ideas, design criteria, product, function	vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used design, make, evaluate, purpose, user, criteria, functional		components, fixing, attaching, tubing, syringe, plunger, split pin, paper fastener pneumatic system, input movement, process, output movement, control, compression, pressure, inflate, deflate, pump, seal, air-tight linear, rotary, oscillating, reciprocating user, purpose, function, prototype, design criteria, innovative, appealing, design brief, research, evaluate, ideas, constraints, investigate	pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor circuit, switch, circuit diagram annotated drawings, exploded diagrams mechanical system, electrical system, input, process, output design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief	
Structures		cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder design, make, evaluate, user, purpose, ideas, design criteria, product, function		shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating font, lettering, text, graphics, decision, evaluating, design brief design criteria, innovative, prototype		same structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional	

Circuits					series circuit, fault, connection, toggle switch, push-to-make switch, push-to-break switch, battery, battery holder, bulb, bulb holder, wire, insulator, conductor, crocodile clip control, program, system, input device, output device user, purpose, function, prototype, design criteria, innovative, appealing, design brief		series circuit, parallel circuit, names of switches and components, input device, output device, system, monitor, control, program, flowchart function, innovative, design specification, design brief, user, purpose
Processes Designing and planning		Design purposeful, functional, appealing products for himself/herself and other users based on design criteria. Communicate ideas through talking, drawing, templates and mock ups..	Create simple designs for a product and use pictures and words to describe intentions	Use knowledge of existing products to design and communicate (through sketches and annotations) a functional and appealing product for a particular purpose and audience.	Use knowledge of existing products to design his/her own functional product and communicate their ideas through sketches, cross-sectional diagrams and computer programmes.	Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	Produce step by step plans to guide his/her making, demonstrating that he/she can apply his/her knowledge of different materials, tools and techniques.
Processes Making and evaluating		Safely measure, mark out, cut and shape materials and components using a range of tools. Evaluate and assess existing products and those that he/she has made using a design criteria.	Select from and use a range of tools and equipment to perform practical tasks e.g. cutting, shaping, joining and finishing. Build structures, exploring how they can be made stronger, stiffer and more stable.	Use techniques which require more accuracy to cut, shape, join and finish his/her work e.g. Cutting internal shapes, slots in frameworks. Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user.	Safely measure, mark out, cut, assemble and join with some accuracy. Investigate and analyse existing products and those he/she has made, suggesting how they may be improved/strengthened .	Use a wide range of methods to strengthen, stiffen and reinforce complex structures and can use them accurately and appropriately. Use his/her knowledge of famous designs to further explain the effectiveness of	.Build more complex 3D structures and apply his/her knowledge of strengthening techniques to make them stronger or more stable. Make detailed evaluations about existing products and his/her own

						existing products and products he/she have made.	considering the views of others to improve his/her work.
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*This progressive document links with PHSCE, where learning importance of a healthy balanced diet for nutritional purposes is delivered.