

| EYFS Provision | | | | | | |
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| Expressive Arts (DT development) | Nursery | | | Reception | | |
| | | <ul style="list-style-type: none"> ➤ Can cut snips in paper ➤ Build and stack objects and join objects together ➤ Build with a purpose in mind ➤ Experiments with colour and texture ➤ Use simple tools to shape, assemble and join materials – glue, paste, scissors, tape ➤ Carve and make shapes into modelling materials ➤ Sort materials by colour | | | <ul style="list-style-type: none"> ➤ Use scissors along straight and curved shape ➤ Build and join 3D structures using a range of materials for a specific purpose ➤ Experiments with colour, design, texture and function ➤ Uses a wide range of tools with greater accuracy to shape, assemble and join materials – glue, tape, scissors, string, staples, clips, weaving ➤ Sort materials by colour and texture | |
| Skills | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Vocabulary | slider, lever, pivot, slot, bridge/guide card, join pull, push, up, down, forwards, backwards design, make, evaluate, user, purpose, ideas, design criteria, product, function, structure, surface, weak, strong, framework, | 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, fabrics and components template, pattern pieces, mark out, decorate, finish features, design criteria, function | fabric, names of fabrics, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, pattern pieces, three-dimensional (3-D) length, width, breadth, capacity marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, innovative, prototype | mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating user, purpose, function prototype, design criteria, innovative, appealing, 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, 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 | 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 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 | 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, frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional |

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| <p>Design</p> | <p>Generate ideas based on simple design criteria and their own experiences, explaining what they could make. Develop, model and communicate their ideas through drawings and mock-ups with card and paper. Design appealing products for a particular user based on simple design criteria. Communicate these ideas through talk and drawings.</p> | <p>Generate initial ideas and simple design criteria through talking and using own experiences. Develop and communicate ideas through drawings and mock-ups. Design a functional and appealing product for a chosen user and purpose based on simple design criteria.</p> | <p>Generate realistic ideas and design criteria collaboratively through discussion, focusing on an appealing, functional product fit for purpose and specific user/s. Develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas.</p> | <p>Generate, develop, model and communicate realistic ideas through discussion and, as appropriate, annotated sketches, cross-sectional and exploded diagrams. Use annotated sketches and prototypes to develop, model and communicate ideas. Gather information about needs and wants, and develop design criteria to inform the design of products that are fit for purpose, aimed at particular individuals or groups.</p> | <p>Generate innovative ideas by carrying out research including questionnaires. Develop a simple design specification to guide their thinking. Develop, model and communicate ideas through talking, drawing, templates, mock-ups and prototypes and, where appropriate, computer aided design. Design purposeful, functional, appealing products for the intended user that are fit for purpose based on a simple design specification.</p> | <p>Carry out research into user needs and existing products, using surveys, interviews, questionnaires and web-based resources. Develop a simple design specification to guide the development of their ideas and products, taking account of constraints including time, resources and cost. Use research to develop a design specification for a functional product that responds automatically to changes in the environment. Take account of constraints including time, resources and cost. Communicate ideas through annotated sketches, pictorial representations of electrical circuits or circuit diagrams.</p> |
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| <p>Make</p> | <p>Plan by suggesting what to do next. Select and use tools, explaining their choices, to cut, shape and join paper and card. Select new and reclaimed materials and construction kits to build their structures. Use simple finishing techniques suitable for the product/structure they are creating.</p> | <p>Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics. Select from and use textiles according to their characteristics.</p> | <p>Plan the main stages of making. Select and use a range of appropriate tools with some accuracy e.g. cutting, joining and finishing. Select fabrics and fastenings according to their functional characteristics e.g. strength, and aesthetic qualities e.g. pattern Order the main stages of making. Explain their choice of materials according to functional properties and aesthetic qualities. Use finishing techniques suitable for the product they are creating.</p> | <p>Order the main stages of making. Select from and use appropriate tools with some accuracy to cut and join materials and components such as tubing, syringes, balloons, paper and card. Select from and use finishing techniques suitable for the product they are creating. Select from and use materials and components, including construction materials and electrical components according to their functional properties and aesthetic qualities.</p> | <p>Produce detailed lists of equipment and fabrics relevant to their tasks. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. Select from and use a range of tools and equipment to make products that are accurately assembled and well finished. Work within the constraints of time, resources and cost.</p> | <p>Formulate a clear plan, including a step-by-step list of what needs to be done and lists of resources to be used. Competently select from and use appropriate tools to accurately measure, mark out, cut, shape and join construction materials to make frameworks. Competently select and accurately assemble materials, and securely connect electrical components to produce a reliable, functional product.</p> |
| <p>Technical Knowledge</p> | <p>Explore and use sliders and levers. Understand that different mechanisms produce different types of movement. Know and use technical vocabulary</p> | <p>Explore and use wheels, axles and axle holders. Distinguish between fixed and freely moving axles. Know and use technical vocabulary</p> | <p>Develop and use knowledge of how to construct strong, stiff shell structures. Develop and use knowledge of nets of cubes and cuboids and, where</p> | <p>Understand and use lever and linkage mechanisms. Distinguish between fixed and loose pivots. Know and use technical vocabulary</p> | <p>Understand that mechanical and electrical systems have an input, process and an output. Understand how gears and pulleys can</p> | <p>Understand how to strengthen, stiffen and reinforce 3-D frameworks. Know and use technical vocabulary relevant to the project.</p> |

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| | relevant to the project. Know how to make freestanding structures stronger, stiffer and more stable. | relevant to the project. | appropriate, more complex 3D shapes. Know and use technical vocabulary relevant to the project. | relevant to the project. Understand and use pneumatic mechanisms. Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs and buzzers. | be used to speed up, slow down or change the direction of movement. Know and use technical vocabulary relevant to the project. | Understand and use electrical systems in their products. |
| Technical Knowledge: Cutting | Learn to hold scissors correctly Use/carry scissors safely Cut in a straight line using a guide | Cutting in a straight line. | Cut out different shapes and patterns using a template. Marking out and accurately cutting. | Cut out different shapes and patterns. | Continue to use scissors Use a range of cutting tools and holding devices to create a frame/structure | Use a range of cutting tools and holding devices to create a frame/structure |
| Technical Knowledge: Sewing | N/A | Understand how simple 3-D textile products are made, using a template to create two identical shapes. Explore different finishing techniques e.g. using painting, fabric crayons, stitching, sequins, buttons and ribbons. | Understanding different types of stitches: blanket stitch, oversew stitch, running stitch. Understand the need for patterns and seam allowances. Different coloured cotton. | N/A | A 3-D textile product can be made from a combination of accurately made pattern pieces, fabric shapes and different fabrics. Fabrics can be strengthened, stiffened and reinforced where appropriate. | N/A |
| Technical Knowledge: Joining | Use glue accurately to join paper/card together | Use sewing skills to join materials. | Using preferred method of stitch to join fabrics. | Use masking tape. Friction fit of tubing on syringes. | Use a glue gun to join materials Understand how additive manufacture can | Join wood using nails and a hammer with PVA Adhesive Low melt Hot Glue |

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| | Fasten two materials together using a paper clip Use adhesive tape to create a strong bond between two materials | | Understand how to securely join two pieces of fabric together. Joining flat faces with masking tape to create 3-D shapes. Experiment with assembling in nets in numerous ways | | create a product Construction using wood | |
| Technical Knowledge: Finishing | Colouring in using pens Using paint | Using paint Decorating with buttons etc. | Using buttons, Velcro to finish. Know how to strengthen, stiffen and reinforce existing fabrics. | Knowing how to reinforce and ensure elements are attached securely. | Fabric pens Adding additional felt pieces | Use finishing and decorative techniques suitable for the product they are designing and making. |
| Evaluate | Explore a range of existing books and everyday products that use simple sliders and levers. Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria. | Explore and evaluate a range of products with wheels and axles. Evaluate their ideas throughout and their products against original criteria. Explore and evaluate a range of existing textile products relevant to the project being undertaken. | Know and use technical vocabulary relevant to the project. Investigate and evaluate a range of existing shell structures including the materials, components and techniques that have been used. Test and evaluate their own products against design | Investigate and analyse books and, where available, other products with lever and linkage mechanisms. Investigate and analyse a range of existing battery-powered products. Evaluate their ideas and products against their own design criteria and identify the strengths and areas for | Investigate and analyse textile products linked to their final product. Compare the final product to the original design specification. Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. Consider the views of | Investigate and evaluate a range of existing frame structures. Critically evaluate their products against their design specification, intended user and purpose, identifying strengths and areas for development, and carrying out appropriate tests. Research key events and individuals |

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| | | | criteria and the intended user and purpose. | improvement in their work. | others to improve their work. Investigate famous manufacturing and engineering companies relevant to the project. | relevant to frame structures. Continually evaluate and modify the working features of the product to match the initial design specification. Investigate famous inventors who developed ground-breaking electrical systems and components. |
| Cooking & Nutrition | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
| Design | Design appealing products for a particular user based on simple design criteria. Generate initial ideas and design criteria through investigating a variety of fruit. Communicate these ideas through talk and drawings. | Design appealing products for a particular user based on design criteria. Generate initial ideas and design criteria through investigating a variety of vegetables. Communicate these ideas through talk, drawings and annotations. | Generate and clarify ideas through discussion with peers and adults to develop design criteria including appearance and taste for an appealing product for a named user and purpose. Use annotated sketches to develop and communicate ideas. | N/A | Generate ideas through research and discussion with peers and adults to develop a design criteria for a design specification. Explore a range of initial ideas to create design brief. Use words and annotated sketches to develop and communicate ideas. | Generate innovative ideas through research and discussion with peers and adults to develop a design brief and criteria for a design specification. Explore a range of initial ideas, and make design decisions to develop a final product linked to user and purpose. Use words, annotated sketches and information and communication technology as |

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| | | | | | | appropriate to develop and communicate ideas. |
| Make | Use simple utensils and equipment to cut, slice and chop safely. Select from a range of fruit and vegetables according to their characteristics focusing on colour (Rainbow fruit kebabs) | Use simple utensils and equipment to e.g. peel, cut, slice, squeeze, grate and chop safely. Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a chosen product. (Salad bowls) | Plan the main stages of a recipe, listing ingredients and equipment. Select and use equipment to prepare ingredients. Select from a list of ingredients to make appropriate food products. | Follow the stages of a recipe, selecting appropriate equipment and demonstrating effective cutting skills. | Write a step-by-step recipe. Select and use appropriate utensils and equipment. Make and present the food product appropriately for the intended user and purpose. | Write a step-by-step recipe, including a list of ingredients, equipment and utensils Select and use appropriate utensils and equipment accurately to measure and combine appropriate ingredients Make, decorate and present the food product appropriately for the intended user and purpose. |
| Evaluate | Taste and evaluate a range of fruit to decide which is appropriate for purpose. (Which fruit for which colour?) Evaluate ideas and finished products against design criteria, have chosen fruits created a rainbow effect. | Taste and evaluate a range of fruit and vegetables to determine the intended user's preferences. Evaluate ideas and finished products against design criteria, including intended user and purpose. | Carry out evaluations of a selection of ingredients and products. Record the evaluations using tables. Evaluate the final product with reference to the design criteria. | N/A | Carry out sensory evaluations of a range of relevant products. Record the evaluations using e.g. tables/charts Evaluate the final product with reference back to the design specification, taking into account the views of others | Carry out sensory evaluations of a range of relevant products and ingredients. Record the evaluations using e.g. tables/graphs/charts such as star diagrams. Evaluate the final product with reference back to the |

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| | | | | | when identifying improvements. | design brief and design specification, taking into account the views of others when identifying improvements. Understand how key chefs have influenced eating habits to promote varied and healthy diets. |
| Technical Knowledge | Understand where a range of fruit and vegetables come from e.g. farmed or grown at home. Understand and use basic principles of a healthy and varied diet to prepare dishes, including how fruit and vegetables are part of The eatwell plate. Know and use technical and sensory vocabulary relevant to the project. | Distinguish between healthy and unhealthy foods. Know that everyone should eat at least five portions of fruit and vegetables every day (Eatwell plate to support) Know basic principles to prepare food safely and hygienically. | Know how to use equipment to prepare and combine food. Know about a range of fresh and processed ingredients relevant for their product, and whether they are grown, reared or caught. Know and use relevant technical vocabulary correctly. | Know how to use appropriate equipment and utensils to prepare and combine food. Know about a range of fresh and processed ingredients appropriate for their product, and whether they are grown, reared or caught. Know and use relevant technical and sensory vocabulary appropriately. | Know how to use utensils and equipment including heat sources to prepare and cook food. Understand about seasonality in relation to food products Know and use relevant technical and sensory vocabulary. | Know how to use utensils and equipment including heat sources to prepare and cook food. Understand about seasonality in relation to food products and the source of different food products. Know and use relevant technical and sensory vocabulary. |
| Vocabulary | fruit and vegetable names, sensory vocabulary e.g. soft, juicy, crunchy, sweet, | fruit and vegetable names, names of equipment and utensils sensory | name of products, names of equipment, ingredients, taste, sweet, sour, appearance, smell, | name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, | ingredients, yeast, dough, flour, wholemeal, baking soda, spice, herbs fat, sugar, carbohydrate, | ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, |

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| | <p>sour, hard flesh, skin, seed, slicing, peeling, cutting, squeezing, healthy diet, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p> | <p>vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria</p> | <p>preference, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch,</p> | <p>spicy, appearance, smell, preference, greasy, moist, cook, 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>protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, 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>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> |
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