



|   | EYFS   | Key Stage 1  | Lower Key Stage 2  | Upper Key Stage 2   |
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| Design Process  | <ul style="list-style-type: none"> <li>- Discuss what a product does or needs to do</li> <li>- Explore the qualities of a range of materials</li> <li>- Make to create an outcome.</li> <li>- Explain why they chose their materials.</li> <li>- Explain what they have made.</li> </ul> | <ul style="list-style-type: none"> <li>- Work from a basic brief to generate ideas and design a simple product fit for purpose and audience.</li> <li>- Explore suitability of common materials before making a choice.</li> <li>- Show awareness of some products similar to their design.</li> <li>- Develop ideas, communicating and recording them in a suitable way (e.g. design book, design page, IT, mind map)</li> <li>- Make a simple mock-up.</li> <li>- Make a final product.</li> <li>- Evaluate their final product – what went well? Did they follow the brief?</li> </ul>  | <ul style="list-style-type: none"> <li>- Work from a brief to design an appealing, functional product fit for purpose and audience.</li> <li>- Explore some possible materials, conducting a simple test to ensure suitability before making a choice.</li> <li>- Show awareness of products similar to their own.</li> <li>- Develop an idea, communicating and recording it in a suitable way (e.g. annotated design page, diagrams, IT)</li> <li>- Perform basic tests, make simple prototypes/pattern pieces as appropriate.</li> <li>- Create a final idea and translate this into a final product which fits the brief.</li> <li>- Evaluate their final product – what went well? Did they follow the brief? How could they improve their design?</li> </ul> | <ul style="list-style-type: none"> <li>- Work from a brief with a simple constraint (e.g. audience / purpose) to design an appealing, functional product.</li> <li>- Research a range of materials, conducting tests as appropriate before selecting the best choice.</li> <li>- Research products similar and different to their own to inform their own design.</li> <li>- Develop a design idea, communicating and recording it via a plan and a labelled diagram.</li> <li>- Test ideas using prototypes/creating pattern pieces and where relevant computer aided design.</li> <li>- Develop and make a final product, based on testing, which meets the brief criteria.</li> <li>- Evaluate their final product, including discussion amongst peers to assess their product against the brief and consider improvements.</li> </ul> |
| Vocab   | <p><b>Tier 2</b><br/>explain, choose, make</p> <p><b>Tier 3</b><br/>join, stick, cut, tear, glue, design, mix, spread, grow</p>  | <p><b>Tier 2</b><br/>label, draw, selecting, model, decorate, purpose, ideas</p> <p><b>Tier 3</b><br/>planning, investigating, design, evaluate, user, product, evaluate, purpose, stitch, weave, mock-up</p>  | <p><b>Tier 2</b><br/>investigate, annotate, appealing, research</p> <p><b>Tier 3</b><br/>design criteria, template, prototype, function, design brief, technique</p>   | <p><b>Tier 2</b><br/>innovative, constraint</p> <p><b>Tier 3</b><br/>design decisions, functionality, aesthetic, design specification, source</p>   |
| Resistant materials<br><small>*Electronics linked to science objectives</small> | <ul style="list-style-type: none"> <li>- Begin to cut and tear materials.</li> <li>- Stick and glue materials together.</li> <li>- Use junk objects to create their own designs.</li> <li>- Begin to consider how they join materials together.</li> </ul>                               | <ul style="list-style-type: none"> <li>- Follow basic procedures for safety.</li> <li>- Cut materials safely using scissors.</li> <li>- Tear, fold and curl materials.</li> <li>- Join using gluing and taping.</li> <li>- Begin to use a simple hinge.</li> <li>- Select materials and tools based on their properties.</li> <li>- Create products based on a design.</li> <li>- Explore and use simple mechanisms [e.g. levers, sliders, wheels and axles], in their products.</li> <li>- Build structures, exploring how they can be made stronger, stiffer and more stable.</li> </ul> | <ul style="list-style-type: none"> <li>- Follow procedures for safety.</li> <li>- Cut, tear and shape materials with increasing accuracy.</li> <li>- Use a wider range of joining methods (e.g. fasteners, tabs, flange)</li> <li>- Choose appropriate materials and tools for a product based on their functional properties and aesthetics.</li> <li>- Strengthen, stiffen and reinforce a product using suitable materials.</li> <li>- Make mechanical /moving elements (e.g. pulleys, levers and linkages)</li> <li>- Choose appropriate materials by testing their properties using a prototype.</li> <li>- Incorporate a simple electrical system into their product.*</li> </ul>  | <ul style="list-style-type: none"> <li>- Follow procedures for safety with a wider range of tools and processes.</li> <li>- Cut and shape materials based on their design with increasing accuracy.</li> <li>- Choose appropriate tools and methods to cut and form a wider range of materials.</li> <li>- Choose appropriate materials by testing their properties using prototypes, justifying their choices.</li> <li>- Make mechanical /moving elements (e.g. gears, cams and pneumatics)</li> <li>- Use a wider range of joining methods (e.g. inserts, wrap, gusset, notch)</li> <li>- Incorporate a more complex electrical system into their designs (e.g. more than one component / adding a switch).</li> <li>- Use computing to program, monitor and control their products.*</li> </ul>                                       |
| Vocab   | <p><b>Tier 2</b><br/>Create, rough, strong, stretchy, smooth, hard, squashy, soft, make, build, junk, recycle</p> <p><b>Tier 3</b><br/>Model, cut, join, make, build, card, plastic, paper, foam, wood, metal, glue, scissors, tape</p>  | <p><b>Tier 2</b><br/>Weaker, stronger, stable, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved, metal, wood, plastic, cuboid, cube, cylinder</p> <p><b>Tier 3</b><br/>Lever, slider, wheel, axle, hinge, cut, fold, join, fix, structure</p>   | <p><b>Tier 2</b> accurate, accuracy, decision, suitability, appropriate, purposeful, product, function</p> <p><b>Tier 3</b><br/>framework, structure, marking out, scoring, refining, tabs, fasteners, flange, adhesives, joining, assemble, material, design choice, mechanism, electronics, circuit, prototype, pulleys, levers and linkages</p>   | <p><b>Tier 2</b><br/>stiffen, strengthen, stability, temporary, permanent, complex, Tier 3 reinforce, element, refinement, gears, cams, hydraulics, inserts, wrap, gusset, notch, electrical system, program,</p>   |

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| Textiles  | <ul style="list-style-type: none"> <li>- Stick and decorate textiles with support.</li> <li>- Thread beads onto a string.</li> <li>- Begin to cut fabric using scissors.</li> </ul>   | <ul style="list-style-type: none"> <li>- Cut textiles using scissors and a template.</li> <li>- Decorate textiles using crayons, paint or sticking.</li> <li>- Join textiles using glue.</li> <li>- Use a running stitch to join textiles using pre-prepared holes.</li> <li>- Create simple weaving using paper or large strips of fabric.</li> </ul>  | <ul style="list-style-type: none"> <li>- Cut textiles with scissors safely.</li> <li>- Thread a needle and tie a knot. (e.g. wool/embroidery needle)</li> <li>- Use a running stitch to join textiles.</li> <li>- Decorate textiles using stamping, printing and simple embellishment.</li> <li>- Weave using a cardboard loom.</li> </ul>  | <ul style="list-style-type: none"> <li>- Use seam allowance and back stitch to join textiles to create a simple product (e.g. A cushion or soft toy).</li> <li>- Use a pattern/template to mark and cut fabric into a specific shape</li> <li>- Use cross stitch, running stitch or filling stitch.</li> <li>- Use applique</li> <li>- Thread a needle and tie a knot, including finishing a thread and starting a new one within a project.</li> <li>- Choose appropriate materials for a textile product based on its use.</li> <li>- Weave using a variety of materials.</li> <li>- Sew a button or bead onto a project.</li> </ul> |
| Vocab   | <p><b>Tier 2</b><br/>Cut, join together, make, idea, material, scissors, glue, bead</p> <p><b>Tier 3</b><br/>fabric, thread, decorate, stick</p>  | <p><b>Tier 2</b><br/>Suitable</p> <p><b>Tier 3</b><br/>Stick, sew, mark out, finish, weave, textiles, warp weft</p>   | <p><b>Tier 2</b><br/>knot, needle, printing, stamping, right side, wrong side</p> <p><b>Tier 3</b><br/>Stitch, seam, embellishment, running stitch, loom</p>  | <p><b>Tier 2</b><br/>Reinforce, product</p> <p><b>Tier 3</b><br/>Template, pattern, cross stitch, running stitch, satin stitch, applique, wadding, embroidery, hem, pattern pieces, pins, button</p>   |
| Food and Nutrition<br><small>* statements link to science</small> | <ul style="list-style-type: none"> <li>- Mix pre-prepared ingredients with the support of an adult, safely and hygienically</li> <li>- Use a blunt knife to spread butter or jam (or alternative) on a cracker or bread.</li> <li>- Understand that fruit and vegetables grow, and which ones are grown in the UK.</li> </ul> | <ul style="list-style-type: none"> <li>- Cut soft foods safely and hygienically using an appropriate tool.</li> <li>- Measure using measuring cups and spoons.</li> <li>- Assemble ingredients to make a simple recipe.</li> <li>- Discuss what a healthy and varied diet should look like, naming and sorting using the five main groups. *</li> <li>- Know where a range of fruits and vegetables come from. *</li> </ul> | <ul style="list-style-type: none"> <li>- Cut a range of foods safely and hygienically with an appropriate tool.</li> <li>- Measure ingredients using scales or jugs.</li> <li>- Follow recipes, starting to use techniques such as peeling, chopping, slicing, mixing, spreading, baking or kneading.</li> <li>- Cook using a pan or oven safely (with supervision and support).</li> <li>- Know where a wider range of foods come from.</li> <li>- Discuss the importance of a range of varied and nutritious foods. *</li> <li>- Discuss the importance of a balanced diet to provide energy for a healthy active lifestyle. *</li> </ul>               | <ul style="list-style-type: none"> <li>- Discuss why we need to store and handle food hygienically (micro-organisms).*</li> <li>- Measure ingredients with a degree of accuracy using an appropriate measuring device.</li> <li>- Scale recipes up or down accordingly.</li> <li>- Design their own simple savoury recipes and test them.</li> <li>- Use a range of baking and cooking techniques with increasing confidence (e.g. boiling, frying, baking, grilling, steaming, roasting, microwaving)</li> <li>- Begin to explain why a recipe or meal is healthy or not, giving reasons based on their understanding.*</li> </ul>    |
| Vocab   | <p><b>Tier 2</b><br/>Basic sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp hard. make, clean, dirty, fruit, vegetable, knife, fork, spoon, plate, bowl.</p> <p><b>Tier 3</b><br/>Recipe, ingredient, cut, stir, mix, spread</p>  | <p><b>Tier 2</b><br/>Measure, weigh, combine, varied, healthy, unhealthy, source, seed, pip, squeezing, sensory vocabulary e.g. crisp, sour</p> <p><b>Tier 3</b><br/>Slicing, peeling, chop, food group, ingredient, peel, mixture, utensil, diet</p>   | <p><b>Tier 2</b><br/>Millilitres, litres, grams, kilograms, technique, variety, texture, taste, sweet, sour, hot, spicy, appearance, fresh, edible, varied diet</p> <p><b>Tier 3</b><br/>Hygienically, hygiene, bake, knead, rise, nutrition, energy, carbohydrate, protein, vitamins, fat, calcium, iron, sugar, salt, frozen, tinned, processed, sweet, savoury, grown, reared, caught, seasonal, harvested</p>   | <p><b>Tier 2</b><br/>Micro-organism, organism, germ, accuracy, ratio, balance, dough, bran, flour, wholemeal, spice, herbs, allergy, intolerance, rotten, spoil,</p> <p><b>Tier 3</b><br/>Portion, yeast, gluten, dairy, shelf-life, use-by, sell-by</p>   |
| Products & Designers (Evaluation & Analysis)                      | <ul style="list-style-type: none"> <li>- Enjoy looking at different products and designs.</li> <li>- Can say whether they like a product/design or not.</li> <li>- Identify materials used to make a product (e.g. plastic, metal, wood)</li> </ul>   | <ul style="list-style-type: none"> <li>- Enjoy looking at different products and designs.</li> <li>- Can say whether they like a product/design or not.</li> <li>- Make a link between their work and a product.</li> <li>- Start to ask their own questions about a product or design.</li> </ul>  | <ul style="list-style-type: none"> <li>- Continue to develop their knowledge of key designers and products.</li> <li>- Can express an opinion about a product, giving simple reasons why.</li> <li>- Make simple comparisons between designers and products.</li> <li>- Make links between their work and the work of a designer/maker.</li> <li>- Discuss when and where a product or design was created</li> <li>- Begin to make links between key events and individuals in design and technology that have helped shape the world.</li> <li>- Discuss: what products are; who they are for; how they are made and what materials are used.</li> </ul> | <ul style="list-style-type: none"> <li>- Can discuss a range of key designers and products.</li> <li>- Express an opinion about a product, justifying reasons.</li> <li>- Make links between their work and the work of others, noting specific influences and techniques.</li> <li>- Explore: how well products have been designed and made; why materials have been chosen; what methods of construction have been used; how well products achieve their purpose.</li> </ul>   |
| Vocab   | <p><b>Tier 2</b><br/>Like, dislike, plastic, paper, cardboard, wood, metal, object, idea,</p> <p><b>Tier 3</b><br/>design, maker</p>  | <p><b>Tier 2</b><br/>compare, reason, idea, audience, part, evaluation,</p> <p><b>Tier 3</b><br/>product, design, materials, natural, manmade, property, designer, brief,</p>   | <p><b>Tier 2</b><br/>Opinion, style, comparison, influential, market, purpose, investigate, analyse, key events, iconic</p> <p><b>Tier 3</b><br/>Component, design movement, engineer</p>   | <p><b>Tier 2</b><br/>Reasoning, market research, consumer, need</p> <p><b>Tier 3</b><br/>Deconstruct, analysis, historical, influence, technique, aesthetic, data analysis, design study, refinement</p>   |