



# Monkston Primary School PKC DT Curriculum Overview



	Autumn	Spring	Summer
<b>Year 1</b>	<p><b>Cook – Dips and Vegetables and Jam Tarts/Mince Pies</b></p> <p><u>Concepts</u>            Nutrition (vegetables)            Sweet and savoury            Cooked and raw            Cooking from different cultures (Greece and England)            What is a recipe?            A pie can be made with pastry            Seasonality (preserving fruit for the winter)</p> <p><u>Skills</u>            Following a simple recipe            Measuring in spoonfuls            Cutting, chopping            Using a knife and a chopping board            Bridge and claw technique            Cutting with scissors            Mashing, mixing            Rubbing fat into flour            Making, rolling and cutting pastry            Baking            Cooling</p>	<p><b>Sew – Animal Sock Puppets</b></p> <p><u>Concepts</u>            Process of design            Making products with fabric            Properties of a range of materials            Using suitable materials            Fixing fabric together            Reusing/recycling materials            Features of a puppet            Features of different animals</p> <p><u>Skills</u>  <b>Research and Investigate:</b> existing products  <b>Design:</b> understand criteria (user, purpose, function, appeal), generate/develop ideas, talking, drawing, labelling  <b>Make:</b> select tools/materials, making paper templates, drawing/cutting shapes, gluing, joining fabric, drying  <b>Use and Evaluate:</b> using puppets, evaluate against criteria</p>	<p><b>Build - Vehicles</b></p> <p><u>Concepts</u>            Process of design            Vehicles: user and purpose            Mechanical systems: wheels and axles            Wheels and axles in everyday examples            Structures and materials – strong, stiff and stable            Materials – properties and functionality</p> <p><u>Skills</u>  <b>Research and Investigate:</b> different types of vehicles, different parts of a vehicle, explore wheels and axles in toy cars  <b>Design:</b> understand criteria (user, purpose, function, appeal), generate/innovate/develop ideas, talking drawing, labelling  <b>Make:</b> select tools/materials for making a toy vehicle with wheels and axles, cutting, different ways of joining, decorating and finishing  <b>Use and Evaluate:</b> car racing in the playground exploring speed, evaluation against criteria and existing products</p>

Year 2	Cook – Pizza and Gingerbread	Sew – Pencil Cases	Build – Moving Pictures
	<p><b>Concepts</b>            Processed v home-made food            Preserving food            Cooking from different cultures (Naples, Italy)            History and cost of food            Savoury            Spices and spicy/sweet            History of food, food transport and cost of ingredients            Decoration            Cooked v raw            Baking</p> <p><b>Skills</b>            Following a simple recipe            Measuring using spoons            Mixing/making a dough            Kneading, rolling and shaping            Spreading            Cutting/slicing – bridge and claw technique            Tearing            Presentation            Baking            Chopping/mixing            Rubbing fat into flour            Cracking an egg            Baking, cooling and decorating</p>	<p><b>Concepts</b>            Process of design            Features of a pencil case – size, materials, fastenings, shape, joining, decoration            Using suitable materials            Properties of different materials            Making products with fabric            Join fabric together (sewing and gluing)            Creating stitches with a needle and thread</p> <p><b>Skills</b>  <b>Research and Investigate:</b> existing products  <b>Design:</b> understand criteria (user, purpose, function, appeal), generate/develop ideas, talking, drawing, labelling  <b>Make:</b> select tools/materials, making paper templates/patterns, drawing/cutting shapes, threading a needle, tying a knot, running stitch, sewing on a button, gluing on decoration  <b>Use and Evaluate:</b> written evaluation against criteria</p>	<p><b>Concepts</b>            Process of design            Mechanical systems (levers and sliders)            Levers and sliders in everyday examples            Structures and materials to make levers and sliders in moving pictures            Strong and stable</p> <p><b>Skills</b>  <b>Research and Investigate:</b> levers and sliders, examples of products (see saw, scissors, hammer, wheelbarrow, shaduf), examples of moving pictures  <b>Design:</b> understand criteria (user, purpose, function, appeal), generate/innovate/develop ideas, talking drawing, labelling, creating a mock-up  <b>Make:</b> select tools/materials for making a moving picture with levers and sliders, cutting, different ways of joining, decorating, finishing  <b>Use and Evaluate:</b> evaluation against criteria and existing products</p>

<p><b>Year 3</b></p>	<p style="text-align: center;"><b>Sew – Key Rings</b></p> <p><b>Concepts</b>          Process of design          Making products with fabric          Types of fabric (natural/synthetic)          Properties of fabric (thickness, softness, stretchiness)          How fabric is fit for purpose          Features of a key ring/decoration (size, materials, shape, joining, stitching, decoration)</p> <p><b>Skills</b>  <b>Research and Investigate:</b> examples of key rings/decorations, different fabrics, how to make felt  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, annotated drawings  <b>Make:</b> Select tools/materials, making paper templates/patterns, drawing/cutting shapes, pinning, threading a needle, tying a knot, running stitch, backstitch, joining, stuffing, gluing, sewing/gluing on a loop  <b>Use and Evaluate:</b> written peer evaluation against criteria and existing products</p>	<p style="text-align: center;"><b>Build – Pop-up Books</b></p> <p><b>Concepts</b>          Process of design          Mechanical systems: linkages: moving pivot, fixed pivot, types of motion          Linkages: uses and purpose in everyday examples          Materials to make linkages in moving books: strong, stiff and stable</p> <p><b>Skills</b>  <b>Research and Investigate:</b> linkages, examples of what products which used these (clothes horse, lifts, tool box, engines)  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and prototypes  <b>Make:</b> select tools/materials for making pop-up book with linkages, cutting, different ways of joining, decorating, finishing  <b>Use and Evaluate:</b> written evaluation against criteria and existing products</p>	<p style="text-align: center;"><b>Cook – Bread and Butter and Pasta</b></p> <p><b>Concepts</b>          Sweet/Savoury          Making bread with flour made from wheat yeast, wholegrains and health          Baking          Dairy products, milk and butter production          Food from different cultures          Pasta, pasta production          Vegetables are part of a healthy diet          Tomatoes (production, preserving)</p> <p><b>Skills</b>          Following a recipe          Measuring/weighing using scales          Using yeast          Mixing          Making a dough, kneading, rising          Baking          Cooling          Slicing, spreading          Using a knife (claw method)          Using a chopping board          Chopping          Peeling          Pressing</p>
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<p><b>Year 4</b></p>	<p style="text-align: center;"><b>Sew – Cushions</b></p> <p><b>Concepts</b>          Process of design          Making products with fabric          Types of fabric (natural/synthetic)          Properties of fabric (thickness, softness, stretchiness)          Features of a cushion (size, materials, shape, joining, decoration)</p> <p><b>Skills</b>  <b>Research and Investigate:</b> appliqué, cushions, running stitch, backstitch, overcast stitch (whipstitch)  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, annotated drawings  <b>Make:</b> select tools/materials, making paper templates/patterns, drawing/cutting shapes, pinning, threading a needle, tying a knot, running stitch, backstitch, overcast stitch (whipstitch), appliqué, stuffing  <b>Use and Evaluate:</b> written evaluation, peer evaluation against criteria</p>	<p style="text-align: center;"><b>Build – Moving Miniature Playgrounds</b></p> <p><b>Concepts</b>          Process of design          Mechanical systems (gears, teeth, interlock, motion transfer, drive gear, driven gear, gearing up, gearing down)          Gears: user and purpose in everyday examples          Structures and materials to make a product with gears (3d shapes, strong, stiff and stable)          Electrical systems: circuits, batteries, bulbs and buzzers</p> <p><b>Skills</b>  <b>Research and Investigate:</b> of products which use gears (tin openers, bicycles, how gears on a bicycle work, history of gears, ancient Greek Antikythera mechanism)  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and exploded diagrams  <b>Make:</b> select tools/materials for making a moving toy with gears and an electrical circuit, cutting, different ways of joining, decorating, finishing  <b>Use and Evaluate:</b> Written evaluation against criteria and existing products</p>	<p style="text-align: center;"><b>Cook – Ratatouille, Couscous and Apple Crumble</b></p> <p><b>Concepts</b>          Sweet/Savoury          Ratatouille (food from France)          Couscous (food from North Africa)          Vegetables as part of a healthy diet          The different parts of a plant which we eat          British cooking          Different varieties of apples, seasonality          Apples as part of a healthy diet          Environment, sustainability, affordability</p> <p><b>Skills</b>          Following a recipe          Weighing using scales          Using a knife (bridge and claw method)          Using a chopping board, chopping and coring          Peeling an onion          Cooking vegetables          Soaking          Rubbing fat into flour          Sprinkling          Baking, cooling</p>
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<p><b>Year 5</b></p>	<p style="text-align: center;"><b>Build – Cams Toys</b></p> <p><b>Concepts</b>          Process of design          Mechanical systems (cams, followers, sliders, camshaft, rotary motion, linear motion, cam profiles)          Everyday examples and purpose of cams mechanisms          Structures and materials to make products with cams and followers (3d shapes, strong, stiff and stable)</p> <p><b>Skills</b>  <b>Research and Investigate:</b> Cams mechanisms, examples of what products use cams and followers (mechanical toys, sewing machines, engines, clocks), history of cams and mechanisms (Ismail al-Jazari), structure of a cams toy  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings, cross-sectional diagrams  <b>Make:</b> Select tools/materials for making a cam toy, cutting, different ways of joining, decorating, finishing  <b>Use and Evaluate:</b> peer evaluation against criteria and existing products</p>	<p style="text-align: center;"><b>Cook – Pitta Bread and Honey Cake</b></p> <p><b>Concepts</b>          Sweet/Savoury          Bread as part of a balanced, healthy diet, different types          Using yeast (leavened/unleavened bread)          Cooking from different cultures          Wheat production          Honey production and history          Health benefits of honey          Cooking from different cultures</p> <p><b>Skills</b>          Following a recipe          Measuring using scales          Activating yeast          Mixing          Making a dough (kneading, rolling, shaping and baking)          Cooling          Cracking an egg          Beating          Pouring          Sprinkling</p>	<p style="text-align: center;"><b>Sew - Bags</b></p> <p><b>Concepts</b>          Process of design          Making products with fabric          Types of fabric (natural/synthetic)          Properties and suitability of fabric          How fabrics are made (weaving)          Features of a bag (size, materials, fastenings, shape, joining, decoration, handles)          Decoration (appliqué, embroidery)</p> <p><b>Skills</b>  <b>Research and Investigate:</b> Methods of decoration (appliqué, embroidery, bag design, materials and features)  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, annotated drawings  <b>Make:</b> select tools/materials, drawing/cutting shapes, pinning, threading a needle, tying a knot, backstitch, overcast stitch (whipstitch), joining, embroidery, appliqué, plaiting  <b>Use and Evaluate:</b> written evaluation against criteria and existing products</p>
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Year 6	Build – Water Walls	Cook – Mezze	Sew – Upcycling Fashion
	<p><b>Concepts</b>            Process of design            Mechanisms (pulleys, Archimedes’ screw)            Everyday examples and purpose of pulleys, purpose of Archimedes’ screw            Structures and materials to make products with pulleys in everyday examples (3d shapes, strong, stiff and stable)            Plastics (pollution/recycling/reuse)            Use of electricity and connection to global warming            Engineering systems to create environmentally friendly solutions            Appropriate use of materials</p> <p><b>Skills</b>            Research and Investigate: Investigate water wall and pulleys  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and prototypes  <b>Make:</b> select tools/materials for making a water wall for Reception with recycled objects, cutting, tying knots, sticking, making holes  <b>Use and Evaluate:</b> evaluation against criteria and existing products</p>	<p><b>Concepts</b>            Sweet/Savoury            Bread as part of a balanced, healthy diet, different types            Using yeast (leavened/unleavened bread)            Cooking from different cultures</p> <p><b>Skills</b>            Following a recipe, weighing ingredients using scales            Using a knife (bridge and claw method)            Chopping, grating            Squeezing a lemon            Using a garlic press            Seasoning            Soaking, mixing, mashing            Cracking an egg            Cooking with meat</p>	<p><b>Concepts</b>            Process of design            Fast fashion and globalisation            Waste and pollution            Upcycling, recycling, sustainability            Processes for making clothes (seams and hems)            Decoration (appliqué, embroidery, buttons, gluing)</p> <p><b>Skills</b>  <b>Research and Investigate:</b> fast fashion, upcycling, recycling, sustainability  <b>Design:</b> devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, annotated drawings, pattern pieces  <b>Make:</b> experimentation with upcycling existing garments, select tools/materials, drawing/cutting shapes, creating pattern pieces, pinning, threading a needle, tying a knot, joining, appliqué, embroidery, running stitch, backstitch, overcast stitch, plaiting, attaching a button  <b>Use and Evaluate:</b> written evaluation, against criteria and existing products, fashion show</p>