

Hilgay Riverside Academy - DT Curriculum - Long Term Plan

Phase	Cycle	Unit 1	Unit 2	Unit 3
EYFS	A/B	Creating with Materials; safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.		
KS1	Year A	<p style="text-align: center;">Animal Sock Puppets</p> <p>Concepts 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 Skills Research and Investigate: Existing products Design: Understand criteria (user, purpose, function, appeal), generate/develop ideas, talking, drawing, labelling Make: Select tools/materials, making paper templates, drawing/cutting shapes, gluing, joining fabric, drying Use and Evaluate: Recording of children using puppets, evaluate against criteria</p>	<p style="text-align: center;">Dips and Vegetables</p> <p>Concepts Nutrition — vegetables Sweet v savoury Cooked v raw Cooking from different cultures — Greece Skills 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</p> <p style="text-align: center;">Jam Tarts/Mince Pies</p> <p>Concepts What is a recipe? Cooking from different cultures — England Sweet v savoury Cooked v raw</p>	<p style="text-align: center;">Vehicles</p> <p>Concepts 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 Vehicles and pollution Skills Research and Investigate: Different types of vehicles, different parts of a vehicle, explore wheels and axles in toy cars Design: Understand criteria (user, purpose, function, appeal), generate/innovate/develop ideas, talking, drawing, labelling Make: Select tools/materials for making a toy vehicle with wheels and axles, cutting, different ways of joining decorating, finishing Use and Evaluate Car racing in the</p>

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			<p>A pie can be made with pastry</p> <p>Seasonality — preserving fruit for the winter</p> <p>Skills</p> <p>Following a simple recipe</p> <p>Measuring in spoonfuls</p> <p>Rubbing fat into flour</p> <p>Mixing</p> <p>Making, rolling and cutting pastry</p> <p>Baking and cooling</p>	<p>playground exploring speed, film/photograph children doing this, evaluation against criteria and existing products</p>
	Year B	<p style="text-align: center;">Pencil Cases</p> <p>Concepts</p> <p>Process of design</p> <p>Features of a pencil case—size, materials, fastenings, shape, joining, decoration</p> <p>Using suitable materials</p> <p>Properties of different materials</p> <p>Making products with fabric</p> <p>Join fabric together — sewing and gluing</p> <p>Creating stitches with a needle and thread</p> <p>Skills</p> <p>Research and Investigate: Existing products</p> <p>Design: Understand criteria (user, purpose, function, appeal), generate/develop ideas, talking, drawing, labelling</p>	<p style="text-align: center;">Moving Pictures</p> <p>Concepts</p> <p>Process of design</p> <p>Mechanical systems: levers and sliders</p> <p>Levers and sliders in everyday examples</p> <p>Structures and materials to make levers and sliders in moving pictures strong, stiff and stable.</p> <p>Skills</p> <p>Research and Investigate: Levers and sliders, examples of what products which used these: see saw, scissors, hammer, wheelbarrow, shaduf, research examples of moving pictures</p> <p>Design: Understand criteria (user, purpose, function, appeal), generate/innovate/develop ideas,</p>	<p style="text-align: center;">Pizza</p> <p>Concepts</p> <p>Processed v home-made food</p> <p>Preserving food</p> <p>Cooking from different cultures — Naples, Italy</p> <p>History and cost of food</p> <p>Savoury</p> <p>Skills</p> <p>Following a simple recipe, measuring using spoons</p> <p>Mixing/making a dough/kneading, rolling and shaping</p> <p>Spreading</p> <p>Cutting/Slicing — bridge and claw technique</p> <p>Tearing</p> <p>Presentation</p> <p>Baking</p> <p>Gingerbread</p>

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		<p>Make: Select tools/materials, using paper templates/ patterns, drawing/cutting shapes, threading a needle, tying a knot, running stitch, gluing on decoration</p> <p>Use and Evaluate: Photograph pencil cases, written evaluation against criteria</p>	<p>talking, drawing, labelling, creating a mock up</p> <p>Make: Select tools/materials for making a moving picture with levers and sliders, cutting, different ways of joining decorating, finishing</p> <p>Use and Evaluate: Photograph pictures, evaluation against criteria and existing products</p>	<p>Concepts</p> <p>Spices, spicy/sweet</p> <p>History of food, food transport and cost of ingredients</p> <p>Decoration</p> <p>Cooked v raw</p> <p>Baking Skills</p> <p>Following a simple recipe</p> <p>Measuring using spoons</p> <p>Chopping, Mixing</p> <p>Rubbing fat into flour</p> <p>Cracking an egg</p> <p>Making a dough, rolling, cutting</p> <p>Baking, cooling, decorating</p>
LKS2	Year A	<p style="text-align: center;">Key Rings/Decorations</p> <p>Concepts</p> <p>Process of design</p> <p>Making products with fabric</p> <p>Types of fabric - natural/synthetic</p> <p>Properties of fabric—thickness, softness, stretchiness</p> <p>How fabric is fit for purpose</p> <p>Features of a key ring/decoration — size, materials, shape, joining, stitching, decoration</p> <p>Skills</p> <p>Research and Investigate: Examples of key rings/ decorations, different fabrics, how to make felt</p> <p>Design: Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas,</p>	<p style="text-align: center;">Pop-Up Books</p> <p>Concepts</p> <p>Process of design</p> <p>Mechanical systems: linkages: moving pivot, fixed pivot, types of motion</p> <p>Linkages: uses and purpose in everyday examples</p> <p>Materials to make linkages in moving books: strong, stiff and stable.</p> <p>Skills</p> <p>Research and Investigate: Linkages, examples of what products which used these: clothes horse, lifts, tool box, engines</p> <p>Design: Devising criteria (user, purpose, function, appeal),</p>	<p style="text-align: center;">Bread and Butter</p> <p>Concept</p> <p>Sweet/Savoury</p> <p>Making bread with flour made from wheat Yeast , wholegrains and health</p> <p>Baking</p> <p>Dairy products, milk and butter production</p> <p>Skills</p> <p>Following a recipe, measuring using scales</p> <p>Using yeast</p> <p>Mixing</p> <p>Making a dough, kneading, rising</p> <p>Baking</p> <p>Cooling</p> <p>Slicing, spreading</p>

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		<p>annotated drawings Make: 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 Use and Evaluate: Photograph, written peer evaluation— against criteria and existing products</p>	<p>generate/innovate/develop ideas, create annotated drawings and prototypes Make: Select tools/materials for making pop-up book with linkages, cutting, different ways of joining, decorating, finishing Use and Evaluate: Photograph books, written evaluation against criteria and existing products</p>	<p style="text-align: center;">Pasta</p> <p>Concepts Sweet/Savoury Food from different cultures Pasta, pasta production Vegetables are part of a healthy diet Tomatoes—production, preserving Skills Following a recipe Weighing using scales Using a knife—claw method Using a chopping board Chopping Peeling Pressing</p>
Year B	<p style="text-align: center;">Moving Miniature Playgrounds</p> <p>Concepts 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 Skills Research and Investigate: Gears; examples of products which used</p>	<p style="text-align: center;">Cushions</p> <p>Concepts 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 Decoration—appliqué Skills Research and Investigate: Appliqué, cushions, running stitch, backstitch, overcast stitch (whipstitch) Design: Devising criteria (user, purpose, function, appeal),</p>	<p style="text-align: center;">Ratatouille</p> <p>Concepts 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 Skills Following a recipe Weighing using scales Using a knife—bridge and claw method Using a chopping board, chopping Peeling an onion Cooking vegetables Soaking</p>	

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		<p>these: tin openers, bicycles, how gears on a bicycle work, history of gears, ancient Greek Antikythera mechanism (used to predict astronomical positions)</p> <p>Design: Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and exploded diagrams</p> <p>Make: Select tools/materials for making a moving toy with gears and an electrical circuit, cutting, different ways of joining, decorating, finishing</p> <p>Use and Evaluate: Written evaluation against criteria and existing products</p>	<p>generate/innovate/develop ideas, annotated drawings</p> <p>Make: 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</p> <p>Use and Evaluate: Photograph, written evaluation, peer evaluation—against criteria</p>	<p>Apple Crumble Concepts</p> <p>Sweet/Savoury</p> <p>British cooking</p> <p>Different varieties of apples, seasonality</p> <p>Apples as part of a healthy diet</p> <p>Environment, sustainability, affordability</p> <p>Skills</p> <p>Following a recipe, weighing using scales</p> <p>Peeling, coring, chopping</p> <p>Using a knife—bridge method</p> <p>Using a chopping board</p> <p>Rubbing fat into flour</p> <p>Sprinkling</p> <p>Baking, cooling</p>
UKS2	Year A	<p style="text-align: center;">Water Walls</p> <p>Concepts</p> <p>Process of design</p> <p>Mechanisms: pulleys, Archimedes' screw</p> <p>Everyday examples and purpose of pulleys, purpose of Archimedes' screw</p> <p>Structures and materials to make products with pulleys in everyday examples—3d shapes, strong, stiff and stable</p> <p>Plastics pollution/recycling/reuse</p> <p>Use of electricity and connection to global warming</p>	<p style="text-align: center;">Mezze</p> <p>Concepts</p> <p>Sweet/Savoury</p> <p>Bread as part of a balanced, healthy diet, different types</p> <p>Using yeast—leavened/unleavened bread, baking</p> <p>Cooking from different cultures</p> <p>Wheat production</p> <p>Skills</p> <p>Following a recipe, weighing ingredients using scales</p> <p>Using a knife—bridge and claw method</p> <p>Chopping, grating</p>	<p style="text-align: center;">Upcycling Fashion</p> <p>Concepts</p> <p>Process of design</p> <p>Fast fashion and globalisation</p> <p>Waste and pollution</p> <p>Upcycling, recycling, sustainability</p> <p>Processes for making clothes—seams and hems</p> <p>Decoration—appliqué, embroidery, buttons, gluing</p> <p>Skills</p> <p>Research and Investigate: Fast fashion, upcycling, recycling, sustainability</p> <p>Design: Devising criteria (user,</p>

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		<p>Engineering systems to create environmentally friendly solutions—Nav Sawhney and the Washing Machine Project. Appropriate use of materials Skills Research and Investigate: Investigate water wall and pulleys Design: Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings and prototypes Make: Select tools/materials for making a water wall for Reception with recycled objects, cutting, tying knots, sticking, making holes Use and Evaluate: Evaluation with user (Reception)— against criteria and existing products</p>	<p>Squeezing a lemon Using a garlic press, seasoning Soaking, mixing, mashing Cracking an egg, cooking with meat</p> <p style="text-align: center;">Electrical Toys</p> <p>Concepts Process of design Electrical Toys: user and purpose in everyday examples. Electrical systems: circuits, batteries, bulbs, buzzers and motors. Structures and materials to make a product with an electrical circuit —3d shapes, strong, stiff and stable. Skills Research and Investigate: Examples of products which use electrical circuits Design: Devising criteria (user, purpose, function, appeal); generate/ innovate/develop ideas; create annotated drawings Make: Select tools/materials for making a toy with an electrical circuit, connecting components, cutting, joining, decorating, finishing Use and Evaluate: Written evaluation against criteria and existing products</p>	<p>purpose, function, appeal), generate/innovate/develop ideas, annotated drawings, pattern pieces Make: 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 Use and Evaluate: Written evaluation, photograph, evaluation—against criteria and existing products, film fashion show</p>
	Year B	Pitta Bread	Cams Toys	Bags

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	<p>Concepts Sweet/Savoury Bread as part of a balanced, healthy diet, different types Using yeast—leavened/unleavened bread, baking Cooking from different cultures Wheat production Skills Following a recipe Measuring using scales Activating yeast Mixing Making a dough, kneading Rolling and shaping Baking, cooling</p> <p style="text-align: center;">Honey Cake</p> <p>Concepts Sweet/Savoury Honey production and history Health benefits of honey Baking Skills Following a recipe Measuring using scales and a measuring jug Mixing Cracking an egg Beating Baking Cooling</p>	<p>Concepts 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 Skills Research and Investigate: 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 Design Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, create annotated drawings, cross-sectional diagrams Make Select tools/materials for making a cam toy, cutting, different ways of joining, decorating, finishing Use and Evaluate Videoed peer evaluation—against criteria and existing products</p>	<p>Concepts 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 Skills Research and Investigate: Methods of decoration— appliqué, embroidery, bag design, materials and features Design: Devising criteria (user, purpose, function, appeal), generate/innovate/develop ideas, annotated drawings Make: Select tools/materials, drawing/cutting shapes, pinning, threading a needle, tying a knot, backstitch, overcast stitch (whipstitch), joining, embroidery, appliqué, plaiting Use and Evaluate: Written evaluation, photograph, film peer evaluation—against criteria and existing products</p>
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