



Coverage of Design and Technology  
Two Year Cycle

Year Group	Autumn Term	Spring Term	Summer Term
YEAR One/Two- Cycle A	<p><u>Mechanisms</u> <u>JCB</u> <b>Sliders and Levers</b> <b>Concepts - Mechanisms (Design, Make, Evaluate)</b> Skills: Fold, tear and cut paper and card Roll paper to create tubes, Cut along lines, straight and curved Use hole punch Insert paper fasteners for card linkages Use lolly sticks/card to make levers and linkages Create hinges Use simple pop ups Investigate strengthening sheet materials (Extend)</p>	<p><u>Food and Nutrition</u> <u>Dr Chris and Xand</u> <b>Preparing Fruits and Vegetables</b> <b>Concepts - Nutrition (Design, Make, Evaluate)</b> Skills: Peel-with a swivel peeler with adult support Spread-soft ingredients, e.g. Hummus Snip-fresh herbs, spring onions Grate-soft foods, e.g. cheese, cucumber Cut-low resistance foods with a table knife in to equal size pieces/slices, e.g. canned pineapple slices, sticks of pepper, mushrooms-use a fork to secure foods</p>	<p><u>Textiles</u> <u>Coco Chanel</u> <b>Templates and joining Techniques</b> <b>Concepts -Textiles (Design, Make, Evaluate)</b> Skills: Join fabrics by using glue, staples or tape Decorate fabrics with buttons, beads, sequins, braids, ribbon Colour fabrics using a range of techniques e.g. fabric paints, printing, painting Cut out shapes which have been created by drawing round a template onto the fabric</p>
YEAR One/ Two Cycle B	<p><u>Mechanisms</u> <u>William Bridges Adams</u> <b>Wheels and Axles</b> <b>Concepts - Mechanisms (Design, Make, Evaluate)</b> Skills: Make vehicles with construction kits which contain free running wheels Use a range of materials to create models with wheels and axles e.g. tubes, dowel, cotton reels Attach wheels to a chassis using an axle</p>	<p><u>Food</u> <u>Ashley Hill</u> <b>Preparing Fruits and Vegetables</b> <b>Concepts -Nutrition (Design, Make, Evaluate)</b> Skills: Juice using a juicer to extract juice, e.g. Orange Measure-using different size measuring spoons, e.g. liquids-refer to ingredients in simple fractions, e.g. half, quarter Thread-thread soft foods onto cocktail sticks, e.g. fruit kebab -strawberries, satsuma segments</p>	<p><u>Structures</u> <b>Free Standing Structures</b> <b>Concepts -Structures (Design, Make, Evaluate)</b> Skills: Join appropriately for different materials and situations e.g. glue, tape, Mark out materials to be cut using a template See glue gun used by an adult</p>

<p>YEAR Three/Four Cycle A</p>	<p><u>Mechanisms</u> <u>Henry Cole</u> <b>Levers and Linkages</b> <b>Concepts - Mechanisms (Design, Make, Evaluate)</b></p> <p>Skills: Cut slots Cut internal shape Use linkages to make movement larger or more varied Use and explore complex pop ups Create nets</p>	<p><u>Structures</u> <u>Robert Gair (cardboard box)</u> <b>Shell structures and computer aided design</b> <b>Concepts - Structures (Design, Make, Evaluate)</b></p> <p>Skills: Make structures more stable by giving them a wide base and/or using diagonal struts. Prototype frame structures Measure and mark square selection, strip and dowel accordingly to 1cm Use glue gun with close supervision (one to one)wood accurately to 1mm Join materials using appropriate methods</p>	<p><u>Textiles</u> <u>Ralph Lauren</u> <b>Concepts - Textiles (Design, Make, Evaluate)</b> <b>2D Shapes and 3D Products</b></p> <p>Skills: Join fabrics using running stitch, over sewing, back stitch Explore fastenings and recreate some e.g. sew on buttons and make loops Use appropriate decoration techniques e.g. appliqué(glued or simple stitches)Create a simple pattern Understand the need for pattern</p>
<p>YEAR Three/Four Cycle B</p>	<p><u>Mechanisms</u> <u>John Boyd Dunlop</u> <b>Pneumatics</b> <b>Concepts - Mechanisms (Design, Make, Evaluate)</b></p> <p>Skills: assemble the systems using syringes, tubing, balloons and plastic bottles. Introduce ways in which pneumatic systems can be used to operate levers. correct and accurate use of measuring, marking out, cutting, joining and finishing skills and techniques</p>	<p><u>Food</u> <u>Joe Wicks</u> <b>Healthy and Varied Diet</b> <b>Concepts - Nutrition (Design, Make, Evaluate)</b></p> <p>Skills: Peel-with a swivel peeler with supervision Spread-ingredients evenly over another food Snip-with greater dexterity and control, e.g. to shred lettuce or cabbage leaves for salad Cut out-placing the cutter in positions to make good of the material available and avoid waste Cut-medium resistance foods with a vegetable knife, e.g. cucumber.-use a fork or the claw grip to secure foods-medium resistant or partly prepared foods using a bridge hold, Press-using a garlic press Mix/stir-any ingredients thoroughly-whisk foods using a hand whisk Spoon-be able to use two spoons to transfer ingredients into different size/shape containers with minimal spillage Measure-using measuring jug &amp; digital scales with support to obtain accuracy Grate-firmer foods, e.g. carrots, apples</p>	<p><u>Electronics</u> <b>Simple Programming and control/ Simple Circuits</b> <b>Concepts - Electronics (Design, Make, Evaluate)</b></p> <p>Skills: Incorporate a circuit with a bulb or buzzer into a model</p>

# EYFS Links- Expressive Arts and Design

## By the end of Reception we will have learnt how to:

- Begin to explore and use the language of designing and making, e.g. join, build, shape.
- Select tools and techniques needed to shape, assemble and join a variety of different materials.
- Use a range of tools, e.g. scissors, hole punches, staplers, woodworking tools, rolling pins, pastry cutters competently, safely and confidently.

## These early skills prepare the children so that in KS1 they can:

- Design products for a target audience using subject specific vocabulary.
- Make products for a target audience using a range of materials and tools competently, safely and confidently.
- Evaluate products for a target audience by reflecting on their choices and making amendments where necessary.