



Design and Technology Technical Skills Progression

Aspect of DT	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Mechanisms	<p>Simple cutting, shaping and joining skills, using scissors, glue, paper fasteners and masking tape.</p> <p>understand the use and purpose</p>	<p>Simple cutting, shaping and joining skills, using scissors, glue, paper fasteners and masking tape.</p> <p>Working with paper and card to make flaps and hinges</p> <p>Understand the use and purpose</p>	<p>Sliders and levers</p> <p>Explore and use mechanisms such as flaps, sliders and levers</p> <p>Gain experience of basic cutting, joining and finishing techniques with paper and card</p>	<p>Wheels and axles</p> <p>Explore different axles</p> <p>Gained experience of different ways to make axle holders and wheels (fixed and free moving)</p> <p>Children can mark out, hold, cut and join different materials and components correctly (inc. card, plastic and wood)</p>	<p>Levers and linkages</p> <p>Can use flaps, sliders and levers correctly</p> <p>Can use fixed and loose pivots</p> <p>Explore different lever and linkage mechanisms: -linear -reciprocating -rotary -oscillating</p> <p>Know how to strengthen and stiffen a product</p>		<p>Pulleys and gears</p> <p>Explore different types of pulleys and what happens when you use different sized pulleys</p> <p>Explore the use of gears and experiment with gear ratios</p>	<p>Cams</p> <p>Experience and understand how Cams work</p> <p>Explore drilling holes in different positions on a cams to create different cams</p> <p>Explore different types of movement using cams –oscillating, reciprocating and rotating</p>
Structures	<p>Using scissors, hole punch and other tools joining card and paper</p> <p>Joining card and paper using different methods</p> <p>Understand the use and purpose</p>	<p>Using scissors, hole punch and other tools joining card and paper</p> <p>Joining card and paper using different methods for different purposes</p> <p>Understand the use and purpose</p>	<p>Freestanding structures</p> <p>Experience of using different joining, cutting and finishing techniques with paper and card</p> <p>Begin to understand that folding materials can help to make them stiffer and stronger</p>	<p>Freestanding structure</p> <p>Know how to use different joining, cutting and finishing techniques with paper and card and can choose appropriately</p> <p>Explore different techniques to help make structures stiffer and stronger</p>	<p>Shell structures</p> <p>Experience of constructing 3D shapes from a pre-drawn net</p> <p>Experience of measuring, marking out, scoring, cutting</p>	<p>Shell structures</p> <p>Can measure, mark out, score, cut, join and shape accurately</p> <p>Can use different techniques to help stiffen and strengthen structures</p>	<p>Frame structures</p> <p>Develop measuring, marking, cutting, shaping and joining skills using a junior hacksaw, G clamp, bench hook, square section wood, card triangles and hand drill</p>	

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Textiles	Explore and use different fabrics	Explore and use different fabrics Cut and join fabrics with simple techniques	Join fabrics using a running stitch	Cut out shapes from templates Additional stitch skill: cross stitch	Add further decoration to work Additional stitch skill: over sew	Can use a pattern and make a prototype Additional stich skill: blanket stitch	Can use pattern pieces and use seam allowance Additional stich skill: back stitch	Can pin and tack fabrics Additional stitch skill: embroidery and possible use of machine sewing
Electronics						Create a simple series circuit Use a range of input and output devices Avoid making short circuits		Write a sequence of instructions Use a control language or create a flowchart Use input and output devices connected to a standalone box
Cooking and nutrition	Experience common fruit a vegetables using appropriate utensils Cutting soft fruits and vegetable using appropriate utensils Begin to develop a food vocabulary using taste, small, texture and feel.	Experience common fruit a vegetables using appropriate utensils and describe sensory response. Begin to widen their food vocabulary using taste, small, texture and feel.	Begin to develop children's peeling and chopping skills	Begin to use techniques such as cutting, peeling and grating	Be able to use a range of techniques such as peeling, chopping, slicing and grating	Further develop skills including mixing, kneading and baking	Gain confidence in the skills of peeling, chopping, slicing, grating, mixing, kneading and baking	Become increasingly skilled at peeling, chopping, slicing, grating, mixing, kneading and baking