



LEYS FARM JUNIOR SCHOOL

DESIGN TECHNOLOGY PROGRESSION OF SKILLS

DT	Pre-KS2 (KS1)	Year 3	Year 4	Year 5	Year 6
	DESIGN				
Textiles/Card/Paper/modelling wire/	<p>Plan Give a brief overview of their plans for design or cooking, using some DT vocabulary</p> <p>Generate Make comments about the function and purpose of their product, and its personal appeal</p> <p>Draw Devise a simple diagram Begin to annotate and highlight digital designs Precision level: rectangles are accurate (e.g. corners don't curve outwards); colouring-in is within the lines</p> <p>Develop Start to volunteer comments about the design criteria while the construction process is ongoing</p>	<p>Plan Verbally explain their plans for design or cooking, linking to techniques and using DT vocabulary</p> <p>Generate Refer to research while talking about their product (i.e. not just its personal appeal)</p> <p>Draw Draw sketches at different points of the design process Draw and annotate digital designs Start to draw to scale Start to draw 3D projections, with shading for clarity Precision level: accurate 2D shapes (e.g. a freehand Union Jack where the internal lines intersect at the centre-point)</p> <p>Develop</p>	<p>Plan Explain their plans for design or cooking in some detail, and in writing, referring to techniques and materials/ingredients</p> <p>Generate Use research to justify the appeal of their product, and the innovativeness of their design</p> <p>Draw Draw a plan or sketch from a description Draw simple diagrams without much guidance Create a scale-bar Clear projections of common 3D shapes Precision level: careful with wrist position to avoid smudging (awareness of rubbings detritus under the page that might affect lines / measurements)</p>	<p>Plan Plan designs in detail with preliminary studies in sketchbooks, with reference to other designs and materials they have studied</p> <p>Generate Make comments about how their product might be altered to appeal to other groups</p> <p>Draw Make an accurate design sketch from someone else's measurements and notes Precision level: consistency within oblique/perspective projections of 3D shapes (i.e. parallel lines shown parallel or to vanishing points)</p> <p>Develop Make reasonable suggestions for how their peers might improve their work</p>	<p>Plan Plan in detail with preliminary studies in sketchbooks, linking to what they have studied and explaining their choices</p> <p>Generate Make sophisticated comments about the limitations of the function and purpose of their product, with reference to different audiences</p> <p>Develop Constructively critique their peers' work and help with the improvements if appropriate</p>



		Politely discuss their peers' work Willingness to alter and/or restart designs	Develop Start to suggest how their peers can improve their work Desire to alter and/or restart designs		
MAKE					
	<p>Select from materials that are supplied for them</p> <p>Tools Set square, soft tape-measure, knitting needles, crocheting sticks</p> <p>Measure To nearest cm and g Use litres and °C for temperature Scales in ones, twos, fives, tens (where the numbers are given)</p>	<p>Work creatively with a range of materials, with some control</p> <p>Tools Protractor, metallic tape-measure, spirit level, sandpaper Screwdrivers (supervised)</p> <p>Measure To nearest mm, nearest 10ml, and 45° for angle Convert between units, e.g. m to cm Use scales where numbers may be missing Make measurements on a computer design Estimate Start to estimate length and distance Start to understand area</p>	<p>Request materials or ingredients that have not been supplied</p> <p>Tools Compass Scissors (to score); adult scissors (to cut) Sewing needle, Stanley knife & glue gun (all supervised)</p> <p>Measure Start to understand inches & miles, stone & pounds, Fahrenheit Measure non-rectilinear distances on a computer design Estimate Make reasonable estimations of length and distance; start to estimate mass, capacity and angle</p>	<p>Request other materials and give reasons</p> <p>Tools Hammer/nails, chisel, mallet, vice (supervised)</p> <p>Measure Angle to nearest ° Calculate area; start to understand volume Use approximate equivalences between metric and imperial Start using linear and area measuring tools on a computer design Estimate Estimate length, distance, mass, capacity, angle; start to estimate temperature and area</p>	<p>Tools Saw, power tools (supervised) Measure Calculate area and volume Fluency with converting units, including between metric and imperial Accurate linear/area measuring tools on a computer design Estimate Make reasonable estimations of length, distance, mass, capacity, angle, area and temperature</p>
EVALUATE					
	Relate products to their design criteria	Link their own and others' designs and products to their function and purpose	Verbalise others' opinions politely and consider following their advice	Use constructive and sensitive language to suggest	Analyse their own and others' responses to their



	<p>Listen courteously to views that differ from their own</p> <p>Follow advice from adults or peers</p> <p>Showcase work</p> <p>Use ICT to create a simple info-sheet about their work (e.g. text with photo)</p> <p>Use pictograms, tally charts, block diagrams</p>	<p>Start to verbalise others' opinions that differ from their own</p> <p>Make choices about following advice</p> <p>Showcase work</p> <p>Make and discuss annotated sketches and diagrams</p> <p>Use bar charts (e.g. not blocks)</p>	<p>Start suggesting improvements to others' designs</p> <p>Link products to their cultural contexts</p> <p>Showcase work</p> <p>Make and discuss cross-sectional and exploded diagrams</p> <p>Use time graphs; discrete and continuous data</p>	<p>improvements to their peers' designs</p> <p>Showcase work</p> <p>Create a presentation with text/images to support them in showcasing work</p> <p>Use timetables; mode and range averages</p>	<p>design, making improvements if appropriate</p> <p>Help improve peers' designs where that offer is welcomed</p> <p>Showcase work</p> <p>Use a range of supporting material to showcase their work, and take questions</p> <p>Use pie charts and line graphs; mean average</p>
COOK					
	<p>Sharps</p> <p>Use butter-knives without close supervision</p> <p>Use peeler on carrots</p> <p>Use grater for cheese</p> <p>Other skills</p> <p>Sieve flour</p> <p>Hot food</p> <p>Watch adults putting food in ovens and explain how to do it safely</p>	<p>Sharps</p> <p>Serrated knife with 'bridge' hold to cut onion (supervised)</p> <p>Cut e.g. peppers with precision (i.e. even size)</p> <p>Use peeler on apples</p> <p>Use a grater for e.g. apple, carrot</p> <p>Other skills</p> <p>Mash potato (roughly); crush garlic</p> <p>Break eggs, often not breaking yokes</p> <p>Knead bread dough</p> <p>Hot food</p> <p>Cook food in an electric stockpot (supervised)</p>	<p>Sharps</p> <p>Use a 'bridge' hold to cut harder veg (e.g. potato)</p> <p>Use peeler on potato</p> <p>Use a grater for e.g. lemon zest</p> <p>Other skills</p> <p>Reliably break eggs without breaking yoke</p> <p>Creaming fat/sugar</p> <p>Hot food</p> <p>Use a microwave or toaster (supervised)</p>	<p>Sharps</p> <p>Use 'claw' grip to cut e.g. celery, carrot</p> <p>Other skills</p> <p>Mash potato to a smooth texture</p> <p>Separate egg whites from yokes</p> <p>Folding meringue mix</p> <p>Hot food</p> <p>Remove e.g. hot biscuits from a baking tray using a fish-slice (supervised)</p>	<p>Sharps</p> <p>Use large knives on hard vegetables like suede (supervised)</p> <p>Hot food</p> <p>Handle hot food with oven gloves (supervised)</p>

