## DT Progression of Skills and Knowledge



EYFS	Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
From across the Strands – Nursery  Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen.  Choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel.  • Explore collections of materials with similar and/or different properties.  • Talk about what they see, using a wide vocabulary.  • Explore how things work	Designing	Generate ideas based on simple design criteria and their own experiences, explaining what they could make.     Develop, model and communicate their ideas through drawings and mock-ups with card and paper.	Generate initial ideas and simple design criteria through talking and using own experiences.     Develop and communicate ideas through drawings and mock-ups.	Generate realistic ideas and design criteria collaboratively through discussion, focusing on the needs of the user and purpose of the product.     Develop ideas through the analysis of existing products and use annotated sketches and prototypes to model and communicate ideas.	Generate realistic and appropriate ideas and their own design criteria through discussion, focusing on the needs of the user.     Use annotated sketches and prototypes to develop, model and communicate ideas.	Generate innovative ideas by carrying out research using surveys, interviews, questionnaires and webbased resources.     Develop a simple design specification to guide their thinking.     Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.	Generate innovative ideas by carrying out research using surveys, interviews, questionnaires and webbased resources.     Develop a simple design specification to guide their thinking.     Develop and communicate ideas through discussion, annotated drawings, exploded drawings and drawings from different views.
	Making	Plan by suggesting what to do next. Select and use tools, explaining their choices, to cut, shape and join paper and card. Use simple finishing techniques suitable for the product they are creating.	Select from and use a range of tools and equipment to perform practical tasks such as cutting and joining to allow movement and finishing. Select from and use a range of materials and components such as paper, card, plastic and wood according to their characteristics.	Order the main stages of making. Select and use appropriate tools to measure, mark out, cut, score, shape and assemble with some accuracy. Explain their choice of materials according to functional properties and aesthetic qualities. Use finishing techniques suitable for the product they are creating.	Order the main stages of making. Select from and use appropriate tools with some accuracy to cut and join materials and components such as tubing, syringes and balloons. Select from and use finishing techniques suitable for the product they are creating.	Produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost.	Produce detailed lists of tools, equipment and materials. Formulate step-by-step plans and, if appropriate, allocate tasks within a team. Select from and use a range of tools and equipment to make products that that are accurately assembled and well finished. Work within the constraints of time, resources and cost.
From across the Strands – Reception      Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons      Explore different materials freely, to develop their ideas about	Evaluating	Explore a range of existing books and everyday products that use simple sliders and levers.     Evaluate their product by discussing how well it works in relation to the purpose and the user and whether it meets design criteria.	Explore and evaluate a range of products with wheels and axles.     Evaluate their ideas throughout and their products against original criteria.	Investigate and evaluate a range of existing shell structures including the materials, components and techniques that have been used.     Test and evaluate their own products against design criteria and the intended user and purpose.	Investigate and evaluate a range of existing shell structures including the materials, components and techniques that have been used.      Evaluate their own products and ideas against criteria and user needs, as they design and make.	Compare the final product to the original design specification. Test products with the intended user, where safe and practical, and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose. Consider the views of others to improve their work. Investigate famous manufacturing and	Compare the final product to the original design specification.     Test products with intended user and critically evaluate the quality of the design, manufacture, functionality and fitness for purpose.     Consider the views of others to improve their work.     Investigate famous manufacturing and engineering companies relevant to the project.

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how to use them and						engineering companies	
what to make.						relevant to the project.	
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<ul> <li>Develop their own ideas and then decide</li> </ul>	Technical	<ul> <li>Explore and use wheels,</li> </ul>	<ul> <li>Explore and use wheels,</li> </ul>	<ul> <li>Develop and use</li> </ul>	<ul> <li>Know and use technical</li> </ul>	<ul> <li>Know and use technical</li> </ul>	Know and use technical
which materials to use to	Knowledge and	axles and axle holders.	axles and axle holders.	knowledge of how to	vocabulary relevant to	vocabulary relevant to	vocabulary relevant to
express them.		Distinguish between	Distinguish between	construct strong, stiff	the project.	the project.	the project.
express them.	Understanding	fixed and freely moving	fixed and freely moving	shell structures.	<ul> <li>Understand how to use</li> </ul>	Understand how to	<ul> <li>Understand how to</li> </ul>
Join different materials		axles.	axles.	Develop and use	appropriate equipment	strengthen, stiffen and	strengthen, stiffen and
and explore different		Know and use technical	Know and use technical	knowledge of nets of	and utensils to prepare	reinforce 3-D frameworks	reinforce 3-D frameworks
textures		vocabulary relevant to	vocabulary relevant to	cubes and cuboids and,	and combine food. •	A 3-D textile product	A 3-D textile product
		the project.	the project.	where appropriate, more	Know about a range of	can be made from a	can be made from a
		Know how to make	Understand how simple	<ul><li>complex 3D shapes.</li><li>Know and use technical</li></ul>	fresh and processed ingredients appropriate	combination of accurately made pattern pieces,	combination of accurately
		freestanding structures	3-D textile products are	vocabulary relevant to	for their product, and	fabric shapes and	made pattern pieces,
		stronger, stiffer and	made, using a template to	the project.	whether they are grown,	different fabrics.	fabric shapes and different fabrics.
		more stable.	create two identical	Know how to use	reared or caught.	Fabrics can be	Fabrics can be
		Understand where a	shapes.	appropriate equipment	Know how to	strengthened, stiffened	strengthened, stiffened
		range of fruit and	Understand how to join	and utensils to prepare	strengthen, stiffen and	and reinforced where	and reinforced where
		vegetables come from e.g. farmed or grown at	fabrics using different	and combine food.	reinforce existing fabrics.	appropriate.	appropriate.
		home.	techniques e.g. running	Know about a range of	Understand how to		Know how to use
			stitch, glue, over stitch,	fresh and processed	securely join two pieces	Know how to use	utensils and equipment
		Understand and use	stapling.	ingredients appropriate	of fabric together.	utensils and equipment	including heat sources to
		basic principles of a healthy and varied diet	Explore different	for their product, and	<ul> <li>Understand the need</li> </ul>	including heat sources to	prepare and cook food.
		to prepare dishes.	finishing techniques e.g.	whether they are grown,	for patterns and seam	prepare and cook food.	Understand about
		Understand how simple	using painting, fabric	reared or caught.	allowances.	<ul> <li>Understand about</li> </ul>	seasonality in relation to
		3-D textile products are	crayons, stitching,			seasonality in relation to	food products and the
		made, using a template to	sequins, buttons and	Know how to		food products and the	source of different food
		create two identical	ribbons.	strengthen, stiffen and		source of different food	products.
		shapes.	Understand where a	reinforce existing fabrics.		products.	
		Understand how to join	range of fruit and	Understand how to		Karaman da san karibatan l	Know and use technical
		fabrics using different	vegetables come from	securely join two pieces		Know and use technical	vocabulary relevant to
		techniques e.g. running	e.g. farmed or grown at home.	of fabric together. • Understand the need for		vocabulary relevant to	the project.
		stitch, glue, over stitch,	Understand and use	patterns and seam		the project.	
		stapling.	basic principles of a	allowances.			
		Explore different	healthy and varied diet to	allowalices.			
		finishing techniques e.g.	prepare dishes, including				
		using painting, fabric	how fruit and vegetables				
		crayons, stitching,	are part of <i>The eatwell</i>				
		sequins, buttons and	plate.				
		ribbons.	Know and use technical				
			and sensory vocabulary				
			relevant to the project.				
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