

## **Robins Lane Primary School** D&T Progression Statements – End of year expectations

Designing	Making	Evaluating	Technical Knowledge	Cooking and Nutrition
<ul> <li>Vear1 in the context of: sliders and levers mechanisms,</li> <li>state what products they are designing and making</li> <li>say whether their products are for themselves or other users</li> <li>describe what their products will work</li> <li>say how their products will work</li> <li>say how they will make their products suitable for their intended users</li> <li>use simple design criteria to help develop their ideas</li> <li>GENERATING, DEVELOPING, MODELLING AND COMMUNICATING IDEAS</li> <li>generate ideas by drawing on their own experiences</li> <li>use knowledge of existing products to help come up with ideas</li> <li>develop and communicate ideas by talking and drawing</li> <li>model ideas by exploring materials, components and construction kits and by making templates and mock- ups</li> <li>use information and communication technology, where appropriate, to develop and communicate their ideas</li> </ul>	<ul> <li>PLANNING</li> <li>plan by suggesting what to do next</li> <li>select from a range of tools and equipment, explaining their choices</li> <li>select from a range of materials and components according to their characteristics</li> <li>PRACTICAL SKILLS AND TECHNIQUES</li> <li>follow procedures for safety and hygiene</li> <li>use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components</li> <li>measure, mark out, cut and shape materials and components</li> <li>assemble, join and combine materials and components</li> <li>use finishing techniques, including those from art and design</li> </ul>	<ul> <li>OWN IDEAS AND PRODUCTS <ul> <li>talk about their design ideas and what they are making</li> <li>make simple judgements about their products and ideas against design criteria</li> <li>suggest how their products could be improved</li> </ul> </li> <li>EXISTINC PRODUCTS <ul> <li>what products are for</li> <li>what products are for</li> <li>how products are used</li> <li>where products might be used</li> <li>what materials products are made from</li> <li>what they like and dislike about products</li> </ul> </li> </ul>	<ul> <li>MAKING PRODUCTS WORK</li> <li>about the simple working characteristics of materials and components</li> <li>about the movement of simple mechanisms such as levers, sliders, wheels and axles</li> <li>how freestanding structures can be made stronger, stiffer and more stable</li> <li>that a 3-D textiles product can be assembled from two identical fabric shapes</li> <li>that food ingredients should be combined according to their sensory characteristics</li> <li>the correct technical vocabulary for the projects they are undertaking</li> </ul>	<ul> <li>WHERE FOOD COMES FROM</li> <li>that all food comes from plants or animals</li> <li>that food has to be farmed, grown elsewhere (e.g. home) or caught</li> <li>FOOD PREPARATION, COOKING AND NUTRITION</li> <li>how to name and sort foods into the five groups in the Eatwell Guide</li> <li>that everyone should eat at least five portions of fruit and vegetables every day</li> <li>how to prepare simple dishes safely and hygienically, without using a heat source</li> <li>how to use techniques such as cutting, peeling and grating</li> </ul>

	Designing	Making	Evaluating	Technical Knowledge	Cooking and Nutrition
Year 3 in the context of: pneumatics mechanisms, textiles, Simple electrical systems Year 4 in the context of: levers and linkages mechanisms, structures from nets, code-control electrical systems	<ul> <li>UNDERSTANDING CONTEXTS, USERS AND PURPOSES</li> <li>work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment</li> <li>describe the purpose of their products</li> <li>indicate the design features of their products that will appeal to intended users</li> <li>explain how particular parts of their products work</li> <li>gather information about the needs and wants of particular individuals and groups</li> <li>develop their own design criteria and use these to inform their ideas</li> <li>GENERATING, DEVELOPING, MODELLING AND COMMUNICATING IDEAS</li> <li>share and clarify ideas through discussion</li> <li>model their ideas using prototypes and pattern pieces</li> <li>use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas</li> <li>use computer-aided design to develop and communicate their ideas</li> </ul>	<ul> <li>Making</li> <li>PLANNINC</li> <li>select tools and equipment suitable for the task</li> <li>explain their choice of tools and equipment in relation to the skills and techniques they will be using</li> <li>select materials and components suitable for the</li> <li>task</li> <li>explain their choice of materials and components according to functional properties and aesthetic qualities</li> <li>order the main stages of making</li> <li>PRACTICAL SKILLS AND TECHNIQUES</li> <li>follow procedures for safety and hygiene</li> <li>use a wider range of materials and components than KSI, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components</li> <li>measure, mark out, cut and shape materials and components with some accuracy</li> <li>assemble, join and combine materials and components with some accuracy</li> <li>apply a range of finishing</li> </ul>	<ul> <li>Evaluating</li> <li>OWN IDEAS AND PRODUCTS         <ul> <li>identify the strengths and areas for development in their ideas and products</li> <li>consider the views of others, including intended users, to improve their work</li> <li>refer to their design criteria as they design and make</li> <li>use their design criteria to evaluate their completed products</li> </ul> </li> <li>EXISTINC PRODUCTS         <ul> <li>how well products have been designed</li> <li>how well products have been made</li> <li>why materials have been chosen</li> <li>what methods of construction have been used</li> <li>how well products meet user needs and wants</li> <li>who designed and made the products</li> </ul> </li> <li>Where products were designed and made</li> <li>where products were designed and made</li> <li>whether products were designed and made</li> <li>whether products were designed and made</li> <ul> <li>when products were designed and made</li> <li>whether products can be recycled or reused</li> </ul> </ul>	<ul> <li>MAKINC PRODUCTS WORK</li> <li>how to use learning from science to help design and make products that work</li> <li>how to use learning from mathematics to help design and make products that work</li> <li>that materials have both functional properties and aesthetic qualities</li> <li>that materials can be combined and mixed to create more useful characteristics</li> <li>that mechanical and electrical systems have an input, process and output</li> <li>the correct technical vocabulary for the projects they are undertaking</li> <li>how mechanical systems such as levers and linkages or pneumatic systems create movement</li> <li>how simple electrical circuits and components can be used to create functional products</li> <li>how to program a computer to control their products</li> <li>how to make strong, stiff shell structures</li> <li>that a single fabric shape can be used to make a 3D textiles product</li> <li>that food ingredients can be</li> </ul>	<ul> <li>Cooking and Nutrition</li> <li>WHERE FOOD COMES FROM         <ul> <li>that a recipe can be adapted a by adding or substituting one or more ingredients</li> <li>that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world</li> </ul> </li> <li>FOOD PREPARATION, COOKING AND NUTRITION         <ul> <li>how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source</li> <li>how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</li> <li>that a healthy diet is made up from a variety and balance of different food and drink, as depicted in the Eatwell Guide</li> <li>that to be active and healthy, food and drink are needed to provide energy for the body</li> </ul> </li> </ul>
systems	to develop and	with some accuracy			

	UNDERSTANDING CONTEXTS,	PLANNING	OWN IDEAS AND PRODUCTS	MAKING PRODUCTS WORK	WHERE FOOD COMES FROM
	USERS AND PURPOSES	<ul> <li>select tools and equipment</li> </ul>	<ul> <li>identify the strengths and</li> </ul>	<ul> <li>how to use learning from</li> </ul>	• that a recipe can be adapted
	• work confidently within a	suitable for the task	areas for development in	science to help design and	a by adding or substituting
	range of contexts, such as	explain their choice of tools	their ideas and products	make products that work	one or more ingredients
	the home, school, leisure,	and equipment in relation to	<ul> <li>consider the views of others,</li> </ul>	<ul> <li>how to use learning from</li> </ul>	<ul> <li>that food is grown (such as</li> </ul>
	culture, enterprise, industry	the skills and techniques	including intended users, to	mathematics to help design	tomatoes, wheat and
	and the wider environment	they will be using	improve their work	and make products that	potatoes), reared (such as
	describe the purpose of their	<ul> <li>select materials and</li> </ul>	• critically evaluate the quality	work	pigs, chickens and cattle)
	products	components suitable for the	of the design, manufacture	• that materials have both	and caught (such as fish) in
	<ul> <li>indicate the design features</li> </ul>	• task	and fitness for purpose of	functional properties and	the UK, Europe and the
Year 5	of their products that will	• explain their choice of	their products as they	aesthetic qualities	wider world
in the	appeal to intended users	materials and components	design and make	• that materials can be	• that seasons may affect the
context of:	<ul> <li>explain how particular parts</li> </ul>	according to functional	• evaluate their ideas and	combined and mixed to	food available
automata	of their products work	properties and aesthetic	products against their	create more useful	<ul> <li>how food is processed into</li> </ul>
mechanisms,	<ul> <li>carry out research, using</li> </ul>	qualities	original design specification	characteristics	ingredients that can be
	surveys, interviews,	• produce appropriate lists of		• that mechanical and	eaten or used in cooking
wooden framed	questionnaires and web-	tools, equipment and	EXISTING PRODUCTS	electrical systems have an	
products,	based resources	materials that they need	how well products have	input, process and output	FOOD PREPARATION, COOKING
products,	<ul> <li>identify the needs, wants,</li> </ul>	• formulate step-by-step plans	been designed	• the correct technical	ANDNUTRITION
motorised	preferences and values of	as a guide to making	how well products have	vocabulary for the projects	<ul> <li>how to prepare and cook a</li> </ul>
electrical	particular individuals and		been made	they are undertaking	variety of predominantly
systems	groups	PRACTICAL SKILLS AND	<ul> <li>why materials have been</li> </ul>	how mechanical systems	savoury dishes safely and
	• develop a simple design	TECHNIQUES	chosen	such as cams or pulleys or	hygienically including,
	specification to guide their	follow procedures for safety	<ul> <li>what methods of</li> </ul>	gears create movement	where appropriate, the use
	thinking	and hygiene	construction have been used	• how more complex electrical	of a heat source
		use a wider range of	<ul> <li>how well products work</li> </ul>	circuits and components can	how to use a range of
Year 6	GENERATING, DEVELOPING,	materials and components	<ul> <li>how well products achieve</li> </ul>	be used to create functional	techniques such as peeling,
in the	MODELLING AND COMMUNICATING IDEAS	than KS1, including	their purposes	products	chopping, slicing, grating,
	<ul> <li>share and clarify ideas</li> </ul>	construction materials and	<ul> <li>how well products meet</li> </ul>	• how to program a computer	mixing, spreading, kneading
context of:	through discussion	kits, textiles, food	user needs and wants	to monitor changes in the	and baking
axle mechanisms,	<ul> <li>model their ideas using</li> </ul>	ingredients, mechanical	<ul> <li>how much products cost to</li> </ul>	environment and control	<ul> <li>that recipes can be adapted</li> </ul>
meenamorno,	prototypes and pattern	components and electrical	make	their products	to change the appearance,
fabric cases,	pieces	components	how innovative products are	• how to reinforce and	taste, texture and aroma
	<ul> <li>use annotated sketches,</li> </ul>	accurately measure, mark	<ul> <li>how sustainable the</li> </ul>	strengthen a 3D framework	that different food and drink
code-control	<ul> <li>use annotated sketches, cross-sectional drawings and</li> </ul>	out, cut and shape materials	materials in products are	• that a 3D textiles product	contain different substances
electrical	exploded diagrams to	and components	<ul> <li>what impact products have</li> </ul>	can be made from a	– nutrients, water and fibre –
systems	develop and communicate	accurately assemble, join	beyond their intended	combination of fabric shapes	that are needed for health
	their ideas	and combine materials and	purpose	• that a recipe can be adapted	
	<ul> <li>use computer-aided design</li> </ul>	components		by adding or substituting	
	to develop and	accurately apply a range of	KEY EVENTS AND INDIVIDUALS	one or more ingredients	
	communicate their ideas	finishing techniques,	• about inventors, designers,		
	<ul> <li>generate innovative ideas,</li> </ul>	including those from art and	engineers, chefs and		
	<ul> <li>generate innovative ideas, drawing on research</li> </ul>	design	manufacturers who have		
	<ul> <li>make design decisions,</li> </ul>	• use techniques that involve a	developed ground-breaking		
		number of steps	products		
	taking account of constraints				

Designing	Making	Evaluating	Technical Knowledge	Cooking and Nutrition
such as time, resources and				
cost				