

# Design and Technology Progression Framework – Kenn

EYFS objectives – From Development matters 2020 – Early learning goals included	Objective codes (for KS1 and KS2 only)	Across KS1	Lower KS2	Upper KS2	Across KS2
<p><b><u>Making/Designing objectives</u></b></p> <p><b>Expressive arts and design</b></p> <ul style="list-style-type: none"> <li>Explore, use and refine a variety of artistic effects to express their ideas and feelings. (Designing)</li> <li>Create collaboratively, sharing ideas, resources and skills (Making and Designing)</li> </ul>	<p><b>PDA - DESIGNING</b></p> <p>Understanding contexts, users and purposes</p>	<p><b>PDA 1</b> - work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment</p> <p><b>PDA 2</b> - state what products they are designing and making</p> <p><b>PDA 3</b> - say whether their products are for themselves or other users</p> <p><b>PDA 4</b> - describe what their products are for</p> <p><b>PDA 5</b> - say how their products will work</p> <p><b>PDA 6</b> - say how they will make their products suitable for their intended users</p> <p><b>PDA 7</b> - use simple design criteria to help develop their ideas</p>	<p><b>PDA 8</b> - gather information about the needs and wants of particular individuals and groups</p> <p><b>PDA 9</b> - develop their own design criteria and use these to inform their idea</p>	<p><b>PDA 10</b> - carry out research, using surveys, interviews, questionnaires and web-based resources</p> <p><b>PDA 11</b> - identify the needs, wants, preferences and values of particular individuals and groups</p> <p><b>PDA 12</b> - develop a simple design specification to guide their thinking</p>	<p><b>PDA13</b> - work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment</p> <p><b>PDA 14</b> - describe the purpose of their products</p> <p><b>PDA 15</b> - indicate the design features of their products that will appeal to intended users</p> <p><b>PDA 16</b> - explain how particular parts of their products work</p>
<p><b>Physical development</b></p> <ul style="list-style-type: none"> <li>Progress towards a more fluent style of moving, with developing control and grace (Making and Designing)</li> </ul>	<p><b>PDB - DESIGNING</b></p> <p>Generating, developing, modelling and communicating ideas</p>	<p><b>PDB 1</b> - generate ideas by drawing on their own experiences</p> <p><b>PDB 2</b> - use knowledge of existing products to help come up with ideas</p> <p><b>PDB 3</b> - develop and communicate ideas by talking and drawing</p> <p><b>PDB 4</b> - model ideas by exploring materials, components and construction kits and by making templates and mockups</p>	<p><b>PDB 6</b> - generate realistic ideas, focusing on the needs of the user</p> <p><b>PDB 7</b> - make design decisions that take account of the availability of resources</p>	<p><b>PDB 8</b> - generate innovative ideas, drawing on research</p> <p><b>PDB 9</b> - make design decisions, taking account of constraints such as time, resources and cost</p>	<p><b>PDB 10</b> - share and clarify ideas through discussion</p> <p><b>PDB 11</b> - model their ideas using prototypes and pattern pieces</p> <p><b>PDB 12</b> - use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas</p> <p><b>PDB 13</b> - use computer-aided design to develop and communicate their ideas</p>

# Design and Technology Progression Framework – Kenn

<ul style="list-style-type: none"> <li>• Develop their small motor skills so that they can use a range of tools competently, safely and confidently. (Making)</li> <li>• Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor. (Make and Design)</li> </ul> <p><b><u>The following are from the Early Learning Goals</u></b></p> <p><b>Physical development (fine motor skills)</b></p> <ul style="list-style-type: none"> <li>• Use a range of small tools, including scissors, paintbrushes and cutlery. (Making and Designing)</li> </ul>		<p><b>PDB 5</b> - use information and communication technology, where appropriate, to develop and communicate their ideas</p>			
--	--	---	--	--	--

# Design and Technology Progression Framework – Kenn

<p><b>Expressive Arts and Design (creating with materials)</b></p> <ul style="list-style-type: none"> <li>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (Making and Designing)</li> </ul>					
---	--	--	--	--	--

		<b>Across KS1</b>	<b>Lower KS2</b>	<b>Upper KS2</b>	<b>Across KS2</b>
	<p><b>PMA - MAKING</b></p> <p>Planning</p>	<p><b>PMA 1</b> - plan by suggesting what to do next</p> <p><b>PMA 2</b> - select from a range of tools and equipment, explaining their choices</p> <p><b>PMA 3</b> - select from a range of materials and components according to their characteristics</p>	<p><b>PMA 4</b> - order the main stages of making</p>	<p><b>PMA 5</b> - produce appropriate lists of tools, equipment and materials that they need</p> <p><b>PMA 6</b> - formulate step-by-step plans as a guide to making</p>	<p><b>PMA 7</b> - select tools and equipment suitable for the task</p> <p><b>PMA 8</b> - explain their choice of tools and equipment in relation to the skills and techniques they will be using</p> <p><b>PMA 9</b> - select materials and components suitable for the task</p> <p><b>PMA 10</b> - explain their choice of materials and components according to functional properties and aesthetic qualities</p>

# Design and Technology Progression Framework – Kenn

	<p><b>PMB - MAKING</b></p> <p>Practical skills and techniques</p>	<p><b>PMB 1</b> - follow procedures for safety and hygiene</p> <p><b>PMB 2</b> - use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components</p> <p><b>PMB 3</b> - measure, mark out, cut and shape materials and components</p> <p><b>PMB 4</b> - assemble, join and combine materials and components</p> <p><b>PMB 5</b> - use finishing techniques, including those from art and design</p>	<p><b>PMB 6</b> - measure, mark out, cut and shape materials and components with some accuracy</p> <p><b>PMB 7</b> - assemble, join and combine materials and components with some accuracy</p> <p><b>PMB 8</b> - apply a range of finishing techniques, including those from art and design, with some accuracy</p>	<p><b>PMB 9</b> - accurately measure, mark out, cut and shape materials and components</p> <p><b>PMB 10</b> - accurately assemble, join and combine materials and components</p> <p><b>PMB 11</b> - accurately apply a range of finishing techniques, including those from art and design</p> <p><b>PMB 12</b> - use techniques that involve a number of steps</p> <p><b>PMB 13</b> - demonstrate resourcefulness when tackling practical problem</p>	<p><b>PMB 14</b> - follow procedures for safety and hygiene</p> <p><b>PMB 15</b> - use a wider range of materials and components than KS1, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components</p>
--	---	---	--	---	---

		Across KS1	Lower KS2	Upper KS2	Across KS2
<p><b><u>Evaluating objectives</u></b></p> <p><b>Expressive arts and Design</b></p> <ul style="list-style-type: none"> <li>Return to and build on their previous learning, refining ideas and developing their ability to represent them.</li> <li>Share their creations, explaining the process they have used. <b>(One of the</b></li> </ul>	<p><b>PEA - EVALUATING</b></p> <p>Own ideas and products</p>	<p><b>PEA 1</b> - talk about their design ideas and what they are making</p> <p><b>PEA 2</b> - make simple judgements about their products and ideas against design criteria</p> <p><b>PEA 3</b> - suggest how their products could be improved</p>	<p><b>PEA 4</b> - refer to their design criteria as they design and make</p> <p><b>PEA 5</b> - use their design criteria to evaluate their completed products</p>	<p><b>PEA 6</b> - critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make</p> <p><b>PEA 7</b> - evaluate their ideas and products against their original design specification</p>	<p><b>PEA 8</b> - identify the strengths and areas for development in their ideas and products</p> <p><b>PEA 9</b> - consider the views of others, including intended users, to improve their work</p>

# Design and Technology Progression Framework – Kenn

Early learning goals)					
	<p><b>PEB - EVALUATING</b></p> <p>Existing products</p>	<p><b>PEB 1</b> - what products are  <b>PEB 2</b> - who products are for  <b>PEB 3</b> - what products are for  <b>PEB 4</b> - how products work  <b>PEB 5</b> - how products are used  <b>PEB 6</b> - where products might be used  <b>PEB 7</b> - what materials products are made from  <b>PEB 8</b> - what they like and dislike about products</p>	<p><b>PEB 9</b> - who designed and made the products  <b>PEB 10</b> - where products were designed and made  <b>PEB 11</b> - when products were designed and made  <b>PEB 12</b> - whether products can be recycled or reused</p>	<p><b>PEB 13</b> - how much products cost to make  <b>PEB 14</b> - how innovative products are  <b>PEB 15</b> - how sustainable the materials in products are  <b>PEB 16</b> - what impact products have beyond their intended purpose</p>	<p><b>PEB 17</b> - how well products have been designed  <b>PEB 18</b> - how well products have been made  <b>PEB 19</b> - why materials have been chosen  <b>PEB 20</b> - what methods of construction have been used  <b>PEB 21</b> - how well products work  <b>PEB 22</b> - how well products achieve their purposes  <b>PEB 23</b> - how well products meet user needs and wants</p>
	<p><b>PEC - EVALUATING</b></p> <p>Key events and individuals</p>				<p><b>PEC 1</b> - about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products</p>
	<p><b>PTK - TECHNICAL KNOWLEDGE</b></p> <p>Making products work</p>	<p><b>PTK 1</b> - about the simple working characteristics of materials and components  <b>PTK 2</b> - about the movement of simple mechanisms such as levers, sliders, wheels and axles  <b>PTK 3</b> - how freestanding structures can be made stronger, stiffer and more stable  <b>PTK 4</b> - that a 3-D textiles product can be assembled from two identical fabric shapes  <b>PTK 5</b> - that food ingredients should be combined according to their sensory characteristics  <b>PTK 6</b> - the correct technical vocabulary for the projects they are undertaking</p>	<p><b>PTK 7</b> - how mechanical systems such as levers and linkages or pneumatic systems create movement  <b>PTK 8</b> - how simple electrical circuits and components can be used to create functional products  <b>PTK 9</b> - how to program a computer to control their products  <b>PTK 10</b> - how to make strong, stiff shell structures  <b>PTK 11</b> - that a single fabric shape can be used to make a 3D textiles product  <b>PTK 12</b> - that food ingredients can be fresh, pre-cooked and processed</p>	<p><b>PTK 13</b> - how mechanical systems such as cams or pulleys or gears create movement  <b>PTK 14</b> - how more complex electrical circuits and components can be used to create functional products  <b>PTK 15</b> - how to program a computer to monitor changes in the environment and control their products  <b>PTK 16</b> - how to reinforce and strengthen a 3D framework  <b>PTK 17</b> - that a 3D textiles product can be made from a combination of fabric shapes  <b>PTK 18</b> - that a recipe can be adapted by adding or</p>	<p><b>PTK 19</b> - how to use learning from science to help design and make products that work  <b>PTK 20</b> - how to use learning from mathematics to help design and make products that work  <b>PTK 21</b> - that materials have both functional properties and aesthetic qualities  <b>PTK 22</b> - that materials can be combined and mixed to create more useful characteristics  <b>PTK 23</b> - that mechanical and electrical systems have an input, process and output  <b>PTK 24</b> - the correct technical vocabulary for the projects they are undertaking</p>

# Design and Technology Progression Framework – Kenn

				substituting one or more ingredients	
		<b>Across KS1</b>	<b>Lower KS2</b>	<b>Upper KS2</b>	<b>Across KS2</b>
	<p><b>PCNA - COOKING AND NUTRITION</b></p> <p>Where food comes from</p>	<p><b>PCNA 1</b> - that all food comes from plants or animals</p> <p><b>PCNA 2</b> - that food has to be farmed, grown elsewhere (e.g. home) or caught</p>		<p><b>PCNA 3</b> - that seasons may affect the food available</p> <p><b>PCNA 4</b> - how food is processed into ingredients that can be eaten or used in cooking</p>	<p><b>PCNA 5</b> - 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</p>
	<p><b>PCNB - COOKING AND NUTRITION</b></p> <p>Food preparation, cooking and nutrition</p>	<p><b>PCNB 1</b> - how to name and sort foods into the five groups in The eatwell plate</p> <p><b>PCNB 2</b> - that everyone should eat at least five portions of fruit and vegetables every day</p> <p><b>PCNB 3</b> - how to prepare simple dishes safely and hygienically, without using a heat source</p> <p><b>PCNB 4</b> - how to use techniques such as cutting, peeling and grating</p>	<p><b>PCNB 5</b> - that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The eatwell plate</p> <p><b>PCNB 6</b> - that to be active and healthy, food and drink are needed to provide energy for the body</p>	<p><b>PCNB 7</b> - that recipes can be adapted to change the appearance, taste, texture and aroma</p> <p><b>PCNB 8</b> - that different food and drink contain different substances – nutrients, water and fibre – that are needed for health</p>	<p><b>PCNB 9</b> - how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source</p> <p><b>PCNB 10</b> - how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking</p>