



Design	Year N/R children should	Year 1/2 children should	Year 3/4 children should	Year 5/6 children should
Curriculum objectives	<ul style="list-style-type: none"> construct with a purpose in mind, using a variety of resources. represent their own ideas, thoughts and feelings through design and technology 	<ul style="list-style-type: none"> design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, ICT 	<ul style="list-style-type: none"> use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design 	
PDA – Designing Contexts, uses and purposes	<ul style="list-style-type: none"> work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment state what products they are designing and making describe what their products are for say how their products will work 	<ol style="list-style-type: none"> work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment state what products they are designing and making say whether their products are for themselves or other users describe what their products are for say how their products will work say how they will make their products suitable for their intended users use simple design criteria to help develop ideas 	<ol style="list-style-type: none"> gather information about the needs and wants of particular individuals and groups develop their own design criteria and use these to inform their ideas 	<ol style="list-style-type: none"> carry out research, using surveys, interviews, questionnaires and web-based resources identify the needs, wants, preferences and values of particular individuals and groups develop a simple design specification to guide their thinking
			<ol style="list-style-type: none"> work confidently within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment describe purpose of their products indicate the design features of their products that will appeal to intended users explain how particular parts of their products work 	
PDB – Designing Ideas	<ul style="list-style-type: none"> generate ideas by drawing on their own experiences develop and communicate ideas by talking 	<ol style="list-style-type: none"> generate ideas by drawing on their own experiences use knowledge of existing products to help come up with ideas develop and communicate ideas by talking and drawing model ideas by exploring materials, components and construction kits and by making templates and mock-ups use information and communication technology, where appropriate, to develop and communicate their ideas 	<ol style="list-style-type: none"> generate realistic ideas, focusing on the needs of the user make design decisions that take account of the availability of resources 	<ol style="list-style-type: none"> generate innovative ideas, drawing on research make design decisions, taking account of constraints such as time, resources and cost
			<ol style="list-style-type: none"> share and clarify ideas through discussion model their ideas using prototypes and pattern pieces use annotated sketches, cross-sectional drawings and diagrams use computer-aided design 	





Make	Year N/R children should	Year 1/2 children should	Year 3/4 children should	Year 5/6 children should
Curriculum objectives	<ul style="list-style-type: none"> use simple tools and techniques competently and appropriately. select appropriate resources and adapts work where necessary. select tools and techniques needed to shape, assemble and join materials they are using. 	<ul style="list-style-type: none"> select from and use a range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristic 	<ul style="list-style-type: none"> select from and use a wider range of tools and equipment to perform practical tasks [e.g. cutting, shaping, joining and finishing], accurately select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities 	
PMA – Making Planning	<ul style="list-style-type: none"> select from a range of tools and equipment, <i>explaining their choices</i> select from a range of materials and components according to their characteristics 	<ol style="list-style-type: none"> <i>plan by suggesting what to do next</i> select from a range of tools and equipment, <i>explaining their choices</i> select from a range of materials and components according to their characteristics 	<ol style="list-style-type: none"> order the main stages of making 	<ol style="list-style-type: none"> produce detailed lists of tools, equipment and materials needed <i>formulate step-by-step plans as a guide to making</i>
PMB – Making Practical skills and techniques	<ul style="list-style-type: none"> follow procedures for safety and hygiene use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components 	<ol style="list-style-type: none"> follow procedures for safety and hygiene use a range of materials and components, including construction materials and kits, textiles, food ingredients and mechanical components measure, mark out, cut and shape materials and components assemble, join and combine materials and components use finishing techniques, including those from art and design 	<ol style="list-style-type: none"> measure, mark out, cut and shape materials and components with some accuracy assemble, join and combine materials and components with some accuracy apply a range of finishing techniques, include those from art and design, with some accuracy 	<ol style="list-style-type: none"> accurately measure to nearest mm, mark out, cut and shape materials and components accurately assemble, join and combine materials/ components accurately apply a range of finishing techniques, including those from art and design use techniques that involve a number of steps demonstrate resourcefulness, e.g. make refinements
			<ol style="list-style-type: none"> follow procedures for safety and hygiene use a wider range of materials and components, including construction materials and kits, textiles, food ingredients, mechanical components and electrical components 	





Evaluate	Year N/R children should	Year 1/2 children should	Year 3/4 children should	Year 5/6 children should
Curriculum objectives	<ul style="list-style-type: none"> represent their own ideas, thoughts and feelings through design and technology use and explore a variety of materials, tools and techniques. 	<ul style="list-style-type: none"> explore and evaluate a range of existing products evaluate their ideas and products against design criteria 	<ul style="list-style-type: none"> investigate and analyse a range of existing products evaluate their ideas and products against their own design criteria and consider the views of others to improve their work understand how key events and individuals in design and technology have helped shape the world 	
PEA – Evaluating Own ideas and products	<ul style="list-style-type: none"> talk about their design ideas and what they are making 	<ol style="list-style-type: none"> talk about their design ideas and what they are making make simple judgements about their products and ideas against design criteria suggest how their products could be improved 	<ol style="list-style-type: none"> refer back to their design criteria as they design and make use their design criteria to evaluate their completed products 	<ol style="list-style-type: none"> critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make <i>evaluate their ideas and products against their original design specification</i>
PEB – Evaluating Existing products	<p>Explore:</p> <ul style="list-style-type: none"> who products are for what products are for how products work how products are used what they like and dislike about products 	<p>Explore:</p> <ol style="list-style-type: none"> what products are who products are for what products are for how products work how products are used where products might be used what materials products are made from what they like and dislike about products 	<p>Investigate and analyse:</p> <ol style="list-style-type: none"> who designed and made the products where products were designed and made when products were designed and made whether products can be recycled or reused <p>Investigate and analyse:</p> <ol style="list-style-type: none"> how well products have been designed how well products have been made why materials have been chosen what methods of construction have been used how well products work how well products achieve their purposes how well products meet user needs and wants 	<p>Investigate and analyse:</p> <ol style="list-style-type: none"> how much products cost to make how innovative products are how sustainable the materials in products are what impact products have beyond their intended purpose
PEC – Evaluating Key events/ individuals	N/A	N/A	<ul style="list-style-type: none"> identify great designers and their work and use research of designers to influence work 	<ul style="list-style-type: none"> identify great designers and their work and use research of designers to influence work





Technical knowledge	Year N/R children should	Year 1/2 children should	Year 3/4 children should	Year 5/6 children should
Curriculum objectives	<ul style="list-style-type: none"> realise tools can be used for a purpose 	<ul style="list-style-type: none"> build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [e.g. levers, sliders, wheels and axles], in their products 	<ul style="list-style-type: none"> apply their understanding of how to strengthen, stiffen and reinforce more complex structures understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] understand and use electrical systems in their products [e.g. series circuits incorporating switches, bulbs, buzzers and motors] apply their understanding of computing to program, monitor and control their products 	
PTK – technical knowledge Making products work	<ul style="list-style-type: none"> use various construction materials know that a single fabric shape can be used to make a 3D textiles product join construction pieces together to build and balance. 	Know: <ol style="list-style-type: none"> about the simple working characteristics of materials and components about the movement of simple mechanisms such as levers, sliders, wheels and axles how freestanding structures can be made stronger, stiffer and more stable <i>that a 3-D textiles product can be assembled from two identical fabric shapes</i> <i>that food ingredients should be combined according to their sensory characteristics</i> <i>the correct technical vocabulary for the projects they are undertaking</i> 	Know: <ol style="list-style-type: none"> how mechanical systems such as levers and linkages or pneumatic systems create movement how simple electrical circuits and components can be used to create functional products how to program a computer to control their products how to make strong, stiff shell structures <i>that a single fabric shape can be used to make a 3D textiles product</i> <i>that food ingredients can be fresh, pre-cooked and processed</i> Know: <ol style="list-style-type: none"> how to use learning from science to help design and make products that work how to use learning from mathematics to help design and make products that work that materials have both functional properties and aesthetic qualities that materials can be combined and mixed to create more useful characteristics that mechanical and electrical systems have an input, process and output the correct technical vocabulary for the projects they are undertaking 	Know: <ol style="list-style-type: none"> how mechanical systems such as cams or pulleys or gears create movement how more complex electrical circuits and components can be used to create functional products how to program a computer to monitor changes in the environment and control their products how to reinforce and strengthen a 3D framework <i>that a 3D textiles product can be made from a combination of fabric shapes</i> <i>that a recipe can be adapted by adding or substituting one or more ingredients</i>





Cooking & Nutrition	Year N/R children should	Year 1/2 children should	Year 3/4 children should	Year 5/6 children should
Curriculum objectives	<ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from 	<ul style="list-style-type: none"> use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from 	<ul style="list-style-type: none"> understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed 	
PCNA – cooking and nutrition Where food comes from	<ul style="list-style-type: none"> know that food has to be farmed, grown elsewhere (e.g. home) or caught 	<ol style="list-style-type: none"> know that all food comes from plants or animals know that food has to be farmed, grown elsewhere (e.g. home) or caught 		<ol style="list-style-type: none"> know that seasons may affect the food available know how food is processed into ingredients that can be eaten or used in cooking
PCNB – cooking and nutrition Food prep, cooking and nutrition	<ul style="list-style-type: none"> know that everyone should eat at least five portions of fruit and vegetables every day how to prepare simple dishes safely and hygienically, without using a heat source 	<ol style="list-style-type: none"> know how to name and sort foods into the five groups in 'The Eatwell plate' know that everyone should eat at least five portions of fruit and vegetables every day how to prepare simple dishes safely and hygienically, without using a heat source how to use techniques such as cutting, peeling and grating 	<ol style="list-style-type: none"> know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eatwell plate' know that to be active and healthy, food and drink are needed to provide energy for the body 	<ol style="list-style-type: none"> know that recipes can be adapted to change the appearance, taste, texture and aroma know that different food and drink contain different substances – nutrients, water and fibre – that are needed for health
			<ol style="list-style-type: none"> know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source know How to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 	

