

**ABINGDON PRIMARY SCHOOL –
Design and Technology Progression of Knowledge**



CURRICULUM AREA	FS	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6
VOCABULARY	tools, join, make, design healthy, unhealthy, fruit and vegetable names,	planning, investigating design, evaluate, make, user, purpose, ideas, product, fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients,	investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients	user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury, hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet	design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble	function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype ingredients, yeast, dough, bran, flour, wholemeal, unleavened, baking soda, spice, herbs fat, sugar, carbohydrate, protein, vitamins, nutrients, nutrition, healthy, varied, gluten, dairy, allergy, intolerance, savoury, source, seasonality utensils, combine, fold, knead, stir, pour, mix, rubbing in, whisk, beat, roll out, shape, sprinkle, crumble
Developing, planning and communicating ideas.		Begin to draw on their own experience to help and generate ideas and research. Begin to understand the development of existing products and what they are for, how they work and materials used. •Start to suggest ideas and explain what they're going to do. Begin to develop their ideas through talk and drawings. Make templates and mock ups of their ideas in card and paper or using ICT.	Start to generate ideas by drawing on their own and others experiences. Begin to develop their design ideas through discussion, observation, drawing and modelling. Identify a purpose for what they intend to make. Understand how to identify a target group for what they intend to design and make. Develop their ideas through talk and drawings. Make templates and label parts. Make templates and mock ups of their ideas in card and paper or using ICT.	With growing confidence generate ideas for an item, considering its purpose and the user/s. Start to order the main stages of making a product. Identify a purpose and establish criteria for a successful product. Understand how well products have been designed, made, what materials have been used and the construction technique. Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products. Start to understand whether products can be recycled or reused. Know to make drawings with labels when designing. When planning explain their choice of materials and components including function and aesthetics.	Start to generate ideas, considering the purposes for which they are designing. Confidently make labelled drawings showing specific features. Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail. Identify the strengths and areas for development in their ideas and products. When planning consider the views of others, including intended users, to improve their work. Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products. When planning explain their choice of materials and	Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and CAD. Begin to use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. With growing confidence apply a range of finishing techniques, including those from art and design. With growing confidence select appropriate materials, tools and techniques.	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and CAD. Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. Accurately apply a range of finishing techniques, including those from art and design. Plan the order of their work, choosing appropriate materials, tools and techniques. Suggest alternative methods of making if the first attempts fail. Identify the strengths and areas for development in their ideas and products.

					components according to function and aesthetics		
<p>Working with tools, equipment, materials and components to make quality products.</p>	<p>Safely use and explore a variety of materials, tools and techniques, experimenting with design and function.</p> <p>Use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>Represent their own ideas, thoughts and feelings through design and technology</p> <p>Handle equipment and tools effectively</p>	<p>Begin to make design using appropriate techniques.</p> <p>Begin to build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms e.g. Leavers, sliders, wheels, and axels.</p> <p>With help, measure, mark out, cut and shape a range of materials.</p> <p>Explore using tools e.g. scissors and hole punch safely.</p> <p>Begin to assemble, join and combine materials together.</p> <p>Begin to use simple finishing techniques to improve the appearance of their product.</p>	<p>Begin to select tools and materials.</p> <p>Use correct vocab to name and describe them.</p> <p>Build structures and explore how to make stronger, stiffer and more stable.</p> <p>With help measure, cut and score with some accuracy.</p> <ul style="list-style-type: none"> • learn to use hand tools, safely and appropriately. <p>Start to assemble and combine materials in order to make a product.</p> <p>Demonstrate draw, cut and make to join a product.</p> <p>Start to choose and use finishing techniques based on own ideas.</p>	<p>Select a wider range of tools and techniques for making their product i.e. construction materials and kits, textiles, food ingredients, mechanical components and electrical components.</p> <p>Explain their choice of tools and equipment in relation to the skills and techniques they will be using.</p> <p>Start to understand that mechanical and electrical systems have an input, process and output.</p> <p>Start to understand that mechanical systems such as levers and linkages or pneumatic systems create movement.</p> <p>Know how simple electrical circuits and components can be used to create functional products.</p> <p>Measure, mark out, cut, score and assemble components with more accuracy.</p> <p>Start to work safely and accurately with a range of simple tools.</p> <p>Start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.</p> <p>Start to measure, tape or pin, cut and join fabric with some accuracy.</p>	<p>Select a wider range of tools and techniques for making their product safely.</p> <p>Know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.</p> <p>Start to join and combine materials and components accurately in temporary and permanent ways.</p> <p>Know how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Understand how more complex electrical circuits and components can be used to create functional products.</p> <p>Continue to learn how to program a computer to monitor changes in the environment and control their products.</p> <p>Understand how to reinforce and strengthen a 3D framework.</p> <p>Now sew using a range of different stitches, to weave and knit.</p> <p>Demonstrate how to measure, tape or pin, cut and join fabric with some accuracy.</p> <p>Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment.</p>	<p>Select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately.</p> <p>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.</p> <p>Understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</p> <p>Understand that mechanical and electrical systems have an input, process and output.</p> <p>Begin to measure and mark out more accurately.</p> <p>Demonstrate how to use skills in using different tools and equipment safely and accurately</p>	<p>Confidently select appropriate tools, materials, components and techniques and use them.</p> <p>Use tools safely and accurately.</p> <p>Assemble components to make working models.</p> <p>Aim to make and to achieve a quality product.</p> <p>With confidence pin, sew and stitch materials together to create a product.</p> <p>Demonstrate when make modifications as they go along.</p> <p>Construct products using permanent joining techniques.</p> <p>Understand how mechanical systems such as cams or pulleys or gears create movement.</p> <p>Know how more complex electrical circuits and components can be used to create functional products and how to program a computer to monitor changes in the environment and control their products.</p> <p>Know how to reinforce and strengthen a 3D framework.</p> <p>Understand that mechanical and electrical systems have an input, process and output.</p>
	<p>Evaluating processes and products</p>	<p>Start to evaluate their product by discussion.</p> <p>When looking at existing products explain what they like and dislike.</p> <p>Begin to evaluate their products as they are developed, identifying strengths and possible changes that they would make.</p>	<p>Evaluate their work against their own criteria.</p> <p>Look at a range of existing products and discuss their preference and likes and dislikes.</p> <p>Start to evaluate their products as they are developed and suggest any changes they may make with confidence talk about their ideas and what they like and dislike about them</p>	<p>Start to evaluate their product against original design criteria e.g. how well it meets its intended purpose</p>	<p>Evaluate their products carrying out appropriate tests</p>	<p>Start to evaluate a product against the original design specification and by carrying out tests.</p> <p>Evaluate their work both during and at the end of the assignment.</p> <p>Begin to evaluate it personally and seek evaluation from others.</p>	<p>Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Evaluate their work both during and at the end of the assignment.</p> <p>Record their evaluations using drawings with labels.</p> <p>Evaluate against their original criteria and suggest ways that their product could be improved.</p>

Food and Nutrition	Children know the importance for good health of a healthy diet	Begin to understand that all food comes from plants or animals. Begin to understand that everyone should eat at least five portions of fruit and vegetables every day. Know how to use techniques such as cutting, peeling and grating.	Explore the understanding that food has to be farmed, grown elsewhere (e.g. home) or caught. Start to understand how to name and sort foods into the five groups in 'The Eat well plate' Know how to prepare simple dishes safely and hygienically, without using a heat source.	Start to know 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. Begin to understand how to use a range of techniques such as chopping, slicing, mixing, spreading, kneading and baking. Start to understand that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate'.	Understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Know that a healthy diet is made up from a variety and balance of different food and drink, as depicted in 'The Eat well plate' Know that to be active and healthy, food and drink are needed to provide energy for the body.	Begin to understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking. Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health	Begin to understand that seasons may affect the food available. Understand how food is processed into ingredients that can be eaten or used in cooking. Know how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source. Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health.
---------------------------	--	---	--	--	--	--	---