

Allendale Primary School Design and Technology Skills Progression

Key area	Year group	Skills
Developing, planning and communicating ideas	EYFS	<ul style="list-style-type: none"> Can they make observations about the features of objects? Can they use their senses to explore and describe objects? Can they think of some ideas of their own? Can they plan how best to approach a task?
	Year 1	<ul style="list-style-type: none"> Can they identify the key features of an existing product? Can they think of some ideas of their own? Can they plan an outcome through pictures with labels? Can they explain their ideas orally?
	Year 2	<ul style="list-style-type: none"> Can they generate ideas through comparing existing products? Can they plan an innovative product? Can they choose the most appropriate tools and materials and explain their choices? Can they describe their design by using pictures, diagrams, and words?
	Year 3	<ul style="list-style-type: none"> Can they plan their design, using accurate diagrams and labels? Can they plan the equipment/ tools needed and give reasons why? Can they start to order the main stages of making their product? Can they identify a design criteria and establish a purpose/ audience for their product? How realistic are their plans? e.g. tools, equipment, materials, components?
	Year 4	<ul style="list-style-type: none"> Can they create a final design for their product based on initial ideas and revisions, based on existing ideas? Can they create a detailed plan considering their target audience, design criteria and intended purpose?
	Year 5	<ul style="list-style-type: none"> Can they survey their target audience and use this to generate ideas? Can they take a user's view into account when designing? Can they produce a detailed step-by-step plan for their design method? Can they suggest some alternative designs and compare the benefits and drawbacks to inform the design process and outcome?
	Year 6	<ul style="list-style-type: none"> Can they use a range of information to inform their design? Can they use market research to inform plans? Can they work within constraints? Can they justify their plan to someone else? Can they consider culture and society in their designs? Have they considered the use of the product when selecting materials? Have they thought about how their product could be marketed through packaging and advertising?

Working with tools, equipment, materials and components to make quality products	EYFS	<ul style="list-style-type: none"> • Can they explain what they are making? • Can they select appropriate resources and tools? • Can they explain which tools are they using and why? • Can they use tools safely? • Can they use tools to manipulate materials?
	Year 1	<ul style="list-style-type: none"> • Can they explain what they are making? • Can they select appropriate resources and tools? • Can they explain which tools are they using and why? • Can they use tools safely?
	Year 2	<ul style="list-style-type: none"> • Can they join materials/ components together in different ways? • Can they measure materials to use in a model or structure? • Can they use joining, folding or rolling to make it stronger?
	Year 3	<ul style="list-style-type: none"> • Can they use equipment and tools accurately and safely? • Can they select the most appropriate materials, tools and techniques to use? • Can they manipulate materials using a range of tools and equipment? • Can they measure, cut and assemble with increasing accuracy?
	Year 4	<ul style="list-style-type: none"> • Can they use equipment and tools with increased accuracy and safety? • Can they select the most effective materials, tools and techniques to use? • Can they manipulate materials effectively using a range of tools and equipment? • Can they measure, cut and assemble accurately?
	Year 5	<ul style="list-style-type: none"> • Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience? • Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?
Evaluating processes and products	Year 6	<ul style="list-style-type: none"> • Can they choose appropriate tools and materials to ensure that the final product will appeal to the audience? • Can they use a range of tools and equipment with good accuracy and effectiveness, within established safety parameters?
	EYFS	<ul style="list-style-type: none"> • Can they identify success and next steps? • Can they change their strategy as needed?
	Year 1	<ul style="list-style-type: none"> • Can they describe how their product works? • Can they identify success and next steps?
	Year 2	<ul style="list-style-type: none"> • Can they assess how well their product works? • If they did it again, can they explain what they would improve?
	Year 3	<ul style="list-style-type: none"> • Start to think about their ideas as they make progress and be willing to make changes if this helps them to improve their work? • Can they assess how well their product works in relation to the purpose?

		<ul style="list-style-type: none"> • Can they explain how they could change their design to make it better?
	Year 4	<ul style="list-style-type: none"> • Think about their ideas as they progress and make changes to improve their work? • Can they assess how well their product works in relation to the design criteria and the intended purpose? • Can they explain how they could improve their design and how their improvement would affect the original outcome?
	Year 5	<ul style="list-style-type: none"> • Can they continuously check that their design is effective and fit for purpose? • Can they assess how well their product works in relation to the design criteria and the intended purpose and suggest improvements? • Can they evaluate appearance and function against the original design criteria?
	Year 6	<ul style="list-style-type: none"> • How well do they test and evaluate their final product? • Is it fit for purpose? • What would improve it? • Would different resources have improved their product? • Would they need more or different information to make it even better? • Does their product meet all design criteria?
Textiles	EYFS	
	Year 1	
	Year 2	<ul style="list-style-type: none"> • Can they measure an amount of a textile? • Can they join textiles together to make a product, using techniques such as stitching? • Can they cut textiles accurately? • Can they explain why they chose a certain textile?
	Year 3	<ul style="list-style-type: none"> • Can they join textiles of different types in a range of ways? • Can they choose textiles both for their appearance and also qualities? • Can they begin to use a range of simple stitches?
	Year 4	<ul style="list-style-type: none"> • Can they consider which materials are fit for purpose and join them appropriately? • Can they devise a template or pattern for their product?
	Year 5	<ul style="list-style-type: none"> • Can they consider the audience when choosing textiles? • Can they make up a prototype first? • Can they use a range of joining techniques? • Can they devise a template or pattern for their product?
	Year 6	<ul style="list-style-type: none"> • Can they consider the audience when choosing textiles? • Can they make up a prototype first? • Can they use a range of joining techniques?
Electrical and	EYFS	
	Year 1	<ul style="list-style-type: none"> • Can they make a product which moves?

Mechanisms		<ul style="list-style-type: none"> • Can they cut materials using scissors? • Can they describe the materials using different words? • Can they say why they have chosen moving parts? 			
	Year 2	<ul style="list-style-type: none"> • Can they join materials together as part of a moving product? • Can they explain how different parts move? 			
	Year 3	<ul style="list-style-type: none"> • Can they make a product which uses mechanical components? • Can they use a range of components? e.g. levers, linkages and pneumatic systems 			
	Year 4	<ul style="list-style-type: none"> • Can they use a simple circuit and add components to it? • Can they make a product which uses both electrical and mechanical components? 			
	Year 5	<ul style="list-style-type: none"> • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics? 			
	Year 6	<ul style="list-style-type: none"> • Can they use different kinds of circuits in their product to improve it? • Can they incorporate a switch into their product? • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics? 			
Construction	EYFS				
	Year 1	<ul style="list-style-type: none"> • Can they arrange pieces of the construction before building? • Can they make a structure/model using different materials? 			
	Year 2	<ul style="list-style-type: none"> • Can they make sensible choices of which material to use for their construction? • Can they make their structure stronger, stiffer or more stable? 			
	Year 3	<ul style="list-style-type: none"> • Can they join materials effectively to build a product? • Can they use a range of techniques to shape and mould materials? • Can they use finishing techniques? e.g. sanding, varnishing, glazing etc 			
	Year 4	<ul style="list-style-type: none"> • Can they measure accurately to build effective structures? • Can they use a range of techniques to shape and mould? • Can they experiment with a range of techniques to increase stability in a structure? • Can they use finishing techniques, showing an awareness of audience? e.g. sanding, varnishing, glazing etc 			
	Year 5	<ul style="list-style-type: none"> • Are their measurements accurate enough to ensure precision? • Can they demonstrate that their product is strong and fit for purpose? • Are they motivated to refine and further improve their product? 			
	Year 6	<ul style="list-style-type: none"> • Are their measurements accurate enough to ensure precision? • Can they demonstrate that their product is strong and fit for purpose? • Are they motivated to refine and further improve their product? 			
Cooking	Growing	Cooking	Nutrition	Food	Enjoying food

	EYFS	<ul style="list-style-type: none"> Do they understand the life cycle of plants and animals? Do they understand that all food comes from plants or animals? Can they describe how food makes the journey from <i>farm to fork</i>? Do they understand what plants need to grow? 	<ul style="list-style-type: none"> Are they aware that ingredients are available from a range of sources (shops, markets, grown at home)? Can they select and use appropriate tools needed for a recipe? Can they use tools effectively and safely? Can they identify and use the appropriate ingredients for a recipe? Can they complete basic hygiene tasks? (e.g. wash hands) 	<ul style="list-style-type: none"> Do they understand that food is a basic requirement of life? Do they understand that we need food to grow, be active and maintain health? Can they sort a selection of foods into healthy and unhealthy groups? Can they identify and talk about a range of fruits and vegetables? 		<ul style="list-style-type: none"> Can they talk about foods they like and dislike with reasons? Can they discuss the food that they eat during special occasions or cultural celebrations? (e.g. birthday, Eid, etc.) Are they willing to try new foods?
	Year 1	<ul style="list-style-type: none"> Do they understand that all food comes from plants or animals? 	<ul style="list-style-type: none"> Can they recognise a range of basic ingredients? 	<ul style="list-style-type: none"> Do they understand that food is a basic requirement of life? 	<ul style="list-style-type: none"> Can they combine fruits or vegetables according to their sensory characteristics? 	<ul style="list-style-type: none"> Can they explain the important social aspects of food and how families in the past ate?
	Year 2	<ul style="list-style-type: none"> Can they sort a number of foods into plant or 	<ul style="list-style-type: none"> Can they explain that ingredients are available from different shops, markets, or grown at home? Can they explain that some ingredients need to 	<ul style="list-style-type: none"> Do they understand that we need food to grow, be active and maintain health? Can they talk about foods they like and dislike with reasons? 	<ul style="list-style-type: none"> Can they talk about a range of fruit and vegetables? Can they identify a wide variety of fruit and vegetables available which can 	<ul style="list-style-type: none"> Can identify lots of food ingredients that are used around the world? Can show a deeper understanding of the country they are

		<p>animal groups?</p> <ul style="list-style-type: none"> • Can they give examples of foods from animal sources? • Can they give examples of foods from plant sources? • Can they explain how animals are farmed? • Can they explain how plants are farmed? • Can they describe how people can grow their own food at home? • Can they describe how food changes 	<p>be prepared before they can be eaten?</p> <ul style="list-style-type: none"> • Can they explain that some equipment has a special job and know what that special job is, e.g. colander, peeler? • Can they use a range of simple equipment? • Can they use basic cooking skills to make a dish? • Can they identify that different foods need to be stored differently? • Can they explain the hygiene and safety rules, which need to be followed before, during and after cooking? • Can they explain that people eat different food and meals according to the time of day, who they are and the occasion? 	<ul style="list-style-type: none"> • Can they sort a selection of foods into the eat-well food groups? • Can they recognise the 5 groups from the eat-well plate? • Can they put together a balanced meal by choosing foods from different food groups? • Do they know that everyone should eat at least 5 portions of fruit and vegetables every day? 	<p>be grouped and individually named?</p> <ul style="list-style-type: none"> • Can they recognise that fruit and vegetables may require treatment before being eaten and know what the treatment is? • Can they use basic food handling, hygienic practices and personal hygiene, including how to control risk by following simple instructions? • Can they explain that fruit and vegetables have nutritional value and are an important part of our diet? • Can they consider that food processing can affect appearance, texture, odour and taste of food? 	<p>studying, their food and customs?</p> <ul style="list-style-type: none"> • Can experience food from a different culture and explain their opinion? • Can explain the part that food plays in special social occasions • Do they understand that a family sitting and eating together is a good thing and that taking part in what they eat at home is fun?
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		from <i>farm to fork</i> to make it safe to eat for some basic foods?				
	Year 3	<ul style="list-style-type: none"> Can they name the sources of common ingredients found in meals? Can they name some foods produced in the UK? Can they name some foods produced outside the UK? Can they explain the climate and conditions affect when and where food is produced? 	<ul style="list-style-type: none"> Do they know that there is a vast range of ingredients used around the world? Do they understand that diets around the world are based on similar food groups? Do they know that food is prepared in different ways due to a number of factors, including country, culture, custom and religion? Can they use the eat-well plate and consider the needs of different people when planning and cooking food? Can they suggest and demonstrate healthier ways to prepare and cook foods? 	<ul style="list-style-type: none"> Do they understand that a range of factors determine what is eaten throughout the world? Can they see the differences between diets varying in individuals for reasons such as availability, preference, resources, time, culture and religion? Do they understand that a variety and balance of food and drink is needed in a healthy diet? Can they identify and classify unfamiliar and composite dishes according to the 5 groups depicted in the eat-well plate? 	<ul style="list-style-type: none"> Can they combine fresh, precooked and processed foods according to their sensory characteristics? Can they consider that people have different preferences? Can they explore databases that are useful for holding survey information? Can they divide food into different groups? Can they recognise foods that form a healthy diet? Can they explore different combinations of ingredients that can affect the taste and texture of the product? 	<ul style="list-style-type: none"> Do they understand the important social aspects of food and how families in the past used to eat? Can they explain that lots of food ingredients are used around the world? Can they experience food from a different culture and comment on their opinions? Can they recognise that diets around the world are based on the 5 food groups? Can they use their prior skills to create food for special occasions?
	Year 4					

			<ul style="list-style-type: none"> • Can they read and interpret basic nutrition information on food packaging when making choices? • Can they plan and prepare food appropriate for a range of different occasions? 	<ul style="list-style-type: none"> • Understand that different diets may comprise similar raw foods combined in different ways? • Do they understand the different proportions of the model in relation to their own diet? • Can they use the eat-well plate when devising meals and menus for themselves and others? 	<ul style="list-style-type: none"> • Can they use appropriate language related to food products? Can they explain the importance of hygienic food preparation and storage? • Can they recognise that combinations of ingredients, preparation and cooking can affect the end product? 	
	Year 5	<ul style="list-style-type: none"> • Can they explain that food goes through basic processes before it reaches us? 	<ul style="list-style-type: none"> • Can they write and follow recipes? • Can they weigh and measure accurately? • Can they select and use the most appropriate ingredients and equipment to plan and cook a range of dishes? 	<ul style="list-style-type: none"> • Do they understand that different types of food provide different amounts of energy? • Can they demonstrate how different amounts of food, known as portions, provide different amounts of energy? 	<ul style="list-style-type: none"> • Can they adapt a recipe by adding or substituting an ingredient? • Can they change ingredients by using a heat source? 	<ul style="list-style-type: none"> • Can they recognise that food around the world is prepared in different ways, sometimes because of culture, customs and religion?
	Year 6	<ul style="list-style-type: none"> • Can they explain how that at home we process food to make it edible and safe? • Can they describe 	<ul style="list-style-type: none"> • Can they modify existing recipes? • Can they demonstrate an extended range of food skills and techniques? 	<ul style="list-style-type: none"> • Can they explain that all food and drink provide nutrients? • Can they explain that other nutrients include vitamins and minerals, which are 	<ul style="list-style-type: none"> • Can they recognise that there is a wide variety of food products from different cultural traditions? • Can they recognise that different food products are an important part of a balanced diet? • Can they investigate and evaluate bread 	<ul style="list-style-type: none"> • Do they know about a country and how its customs and culture can affect the food people eat? • Can they describe an experience of trying food from a different culture? Do they understand how different families eat their meals and know

		<p>how food is processed on a large scale in places such as restaurants and factories to make it edible and safe to eat?</p>	<ul style="list-style-type: none"> • Can they describe how food can spoil and decay due to the action of microbes, insects and other pests? • Can they explain how to use date marks and food storage instructions on food packaging? • Can they demonstrate good personal hygiene when cooking? • Can they demonstrate good food safety and hygiene when cooking? 	<p>needed to keep the body healthy?</p> <ul style="list-style-type: none"> • Can they describe how some foods also provide fibre but the body doesn't digest this? • Can they recognise that the amount of energy and nutrients provided by food depends on the portion eaten? • Do they understand that energy is provided by the nutrients, carbohydrates fat and protein? • Can they understand the functions of different nutrients? • Can they recognise the nutrients provided by each section of the eat-well plate? 	<p>products according to their characteristics?</p> <ul style="list-style-type: none"> • Can they use appropriate vocabulary to describe different food products • Can they compare the processes involved in making different food products – commercial and domestic? • Can they recognise that ingredients have different characteristics? • Do they know that the proportion of ingredients will affect the product? • Can they apply the rules for basic food hygiene and other safe practices? 	<p>how to use basic cooking skills and equipment to prepare food?</p> <ul style="list-style-type: none"> • Can they describe their experience the part food has to play in special, social occasions?
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