



Progression of Knowledge in Design & Technology



Reception		Children at the expected level of development will: <ul style="list-style-type: none">• Draw and paint using a range of materials, tools and techniques, experimenting with colour, design, texture, form and function• Share their creations, explaining the process they have used;• Make use of props and materials when role playing characters in narratives and stories	
	Year 1	Year 2	Year 3
Evaluating Products	<ul style="list-style-type: none">• I know what a product is.• I can say what a product is for.• I can describe a product (who is it for, what is made from, how is it made, how it works).	<ul style="list-style-type: none">• I know the features of familiar products• I can give reasons for some features (colour, choice, material used and joining technique).	<ul style="list-style-type: none">• I can start to research and evaluate existing products• I understand that products are designed for a purpose (e.g. a problem, an audience, an event.)
Designing	<ul style="list-style-type: none">• I can think of ideas and with help can put them into practice.• I know what a design is.• I can use pictures and words to describe what I want to do.	<ul style="list-style-type: none">• I can think of ideas and I can put them into practice.• I know what a design is and its purpose.• I can use pictures and words to describe what I want to do (materials, techniques, features, mechanics and tools).	<ul style="list-style-type: none">• I can think of ideas and plan what to do next, based on what I know about materials and components.• I can select tools, techniques and materials.• I can explain my choices giving reasons.
Construction	<ul style="list-style-type: none">• I know what materials I can use for my structure• I know what a join is.• I can measure and mark out materials• I can cut using scissors.• I can follow instructions to make my product.	<ul style="list-style-type: none">• I know what materials and tools I can use for my structure.• I know what a join is and can use one.• I can measure and mark out materials with care and increasing accuracy.• I can cut materials safely (scissors).• I have found out how to make	<ul style="list-style-type: none">• I can select and use appropriate materials.• I can use an appropriate join.• I measure and mark out materials carefully and accurately (cm).• I can use scoring and folding to shape materials accurately.• I can make cuts accurately

		materials for my structure stronger (folding, rolling and joining, columns and triangles).	(scissors and saws).
Mechanics and Electrics			<ul style="list-style-type: none"> • I have explored how moving objects work. • I can explain how wheels, axels, turning mechanisms, hinges and levers work. • I can make a product that moves using a turning mechanism (e.g. wheels, winding) or a lever or a hinge (to make a movement). • I can explain how the mechanism in my product works.
Textiles	<ul style="list-style-type: none"> • I can describe textiles by the way they feel. • I can make a simple product from textiles. • I can cut fabric using a template. • I can join fabrics using glue. • I can make sure my work is neat and tidy. • I can weave. 	<ul style="list-style-type: none"> • I know that textiles have different properties. • I can alter a textile to make it stronger. • I can measure, mark out and cut fabric. • I can join fabrics using running stitch. 	<ul style="list-style-type: none"> • I can select the appropriate textile(s) for my product based on the properties of the material. • I can measure, mark out and cut fabric. • I can use sharp scissors accurately to cut textiles. • I can choose the best methods of joining fabrics in order to create a product which is fit for purpose.
Cooking	<ul style="list-style-type: none"> • I can use a knife safely. • I can mix and combine ingredients. • I am aware of hygiene for cooking. • I can explain what a recipe is. • I can make a simple snack. 	<ul style="list-style-type: none"> • I can use a variety of utensils safely. • I can follow a simple recipe. • I can combine ingredients in various ways. • I can apply hygiene rules to cooking. • I can use explain how some foods are made and some are natural. • I know where some foods come from. 	<ul style="list-style-type: none"> • I can select ingredients based on a recipe. • I can work in a safe, hygienic way. • I can measure out my ingredients. • I understand what is healthy and unhealthy. • I can combine two cooking processes to make a product.

		<ul style="list-style-type: none"> I can prepare a healthy snack. 	<ul style="list-style-type: none"> I know where food comes from. I can prepare a healthy lunch.
Evaluating	<ul style="list-style-type: none"> I can talk about my own work (features, design, opinion) I can describe how my product works 	<ul style="list-style-type: none"> I can begin to talk about my own and others' work (features, design, and opinion). I can explain why I chose certain materials, techniques and tools. I can describe how my product works. 	<ul style="list-style-type: none"> I can talk about my own and others' work (features, design, opinion). I can explain why I chose certain materials, techniques and tools. I can say what I would do to improve my product.
	Year 4	Year 5	Year 6
Evaluating Products	<ul style="list-style-type: none"> I can research and evaluate existing products to inform me in my own planning. I understand that products are designed for a purpose (e.g. a problem, an audience, an event). 	<ul style="list-style-type: none"> I can research and evaluate existing products giving reasons for the decisions of the designers (materials, design, tools, and techniques). I can use the ideas from current designers to help me with my own. 	<ul style="list-style-type: none"> I can research and evaluate existing products giving reasons for the decisions of the designers (materials, design, tools, and techniques). I can adapt the ideas from current designers to help me with my own.
Designing	<ul style="list-style-type: none"> I can think of ideas and plan what to do next, based on what I know about materials and components. I can select the appropriate tools, techniques and materials explaining my choices. I can communicate my ideas using labelled sketches giving reasons for my choices. I can produce step by step plans. 	<ul style="list-style-type: none"> I can use my knowledge of design, designers and further research to help influence my own design. I can create models to show aspects of my design. I can produce step by step plans. I can come up with solutions to problems as they happen. 	<ul style="list-style-type: none"> I can use my knowledge of design designers and further research to help influence my own design. I can create models or prototypes to show aspects of my design. I can produce step by step plans. I can use computer aided design. I can come up with solutions to problems as they happen.

Construction	<ul style="list-style-type: none">• I can select and use appropriate materials, joins, folds and techniques.• I can make cuts and holes accurately and precisely.• I can join materials to make products using both permanent and temporary fastenings.• My methods of working are increasingly precise aiming for a high quality finish.• I can use art skills to enhance the visual appeal of my product bearing in mind the purpose and audience.	<ul style="list-style-type: none">• I can select from a variety of materials best suited to my design.• I can measure using cm, mm.• I can shape products accurately and precisely.• I can make cuts accurately and reject pieces that are not accurate.• My joins are strong and stable, giving extra strength to my products. Some joins are flexible.• My methods of working are precise so that products have a high quality finish.	<ul style="list-style-type: none">• I can test my construction methods (materials, cuts, folds, joins) using a prototype.• I can measure using cm, mm.• I can shape products accurately and precisely.• I can make cuts accurately and reject pieces that are not accurate and improve my technique.• My methods of working are precise so that products have a high quality finish.• I can use computer programming when creating a product.
Mechanics and Electrics	<ul style="list-style-type: none">• I can explain the application of mechanisms to create movement.• I can use simple circuits to either illuminate or create motion.• I can make a product that uses both electrical and mechanical components.• My product has a good finish so that a user will find it both useful and attractive	<ul style="list-style-type: none">• I have chosen components that can be controlled by switches or by ICT equipment.• My product is improved after testing.• I can use my science skills (resistance, batteries in series or parallel, variable resistance to dim lights or control speed) to alter the way my electrical products behave.• I can use precise electrical connections.• I can explain mechanical movement using hydraulics and pneumatics.• I can use other DT skills to create housings for my mechanical components. My product is well finished in a way that would appeal.	

Textiles	<ul style="list-style-type: none"> • I can consider the advantages and disadvantages of material for a product. • I can create and use a template or pattern to create an accurate product. • I can use stitching to help create a product that is sturdy and fit for purpose. • I can combine materials to add strength or visual appeal. 	<ul style="list-style-type: none"> • I can experiment with a range of materials until I find the most appropriate material for the job. • I can consider the cost and visual appeal of the material. • I can mark out using my own patterns and templates. • I can join textiles to make a durable and desirable product. • I can combine art skills to add colour and texture to my work. 	<ul style="list-style-type: none"> • I can experiment with a range of materials until I find the right mix of affordability, appeal and appropriateness for the job. • My products have an awareness of commercial appeal. • I can mark out using my own patterns and templates adapting them if needed. • I can combine art skills to add colour and texture to my work. • I can join textiles using art skills to make a desirable product.
Cooking	<ul style="list-style-type: none"> • I can select ingredients for my product with reasons. • I can work in a safe, hygienic way. • I can use mathematical skills to measure out my ingredients. • I can follow steps in a recipe using different methods (combining, melting, boiling and baking). • I can explain why we need a healthy diet. • I can use my knowledge of the food groups to plan and prepare a healthy lunch. 	<ul style="list-style-type: none"> • I can explain why I need certain food types and select ingredients based on this. • I can work safely and hygienically. • I know about local produce and seasonality. • I understand food choices (veganism, vegetarianism) and food intolerances. • I can follow several processes in a recipe. • I can use my knowledge of the food groups to plan and prepare a healthy dinner. 	<ul style="list-style-type: none"> • I know where different crops can be found around the world. • I can understand carbon footprint. • I know different cultures have different diets and how these have influenced our diet. • I can work safely and hygienically. • I can follow several processes in a recipe. • I can adapt my recipe based on my audience and taste. • I can use my knowledge of the food groups to plan and prepare a balanced dinner.
Evaluating	<ul style="list-style-type: none"> • I can identify what is working well and what can be improved (this is during the make as 	<ul style="list-style-type: none"> • I can reflect on my designs and develop them bearing in mind the way they will be used (during the process). 	<ul style="list-style-type: none"> • I can reflect on my designs and adapt them based on testing and a prototype.

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	Year 7
Evaluating Products	<ul style="list-style-type: none"> • I can investigate and analyse new and emerging technologies • I can investigate and analyse products through disassembly to determine how they are constructed and function • I can investigate and analyse positive and negative impact that products can have in the wider world
Designing	<ul style="list-style-type: none"> • I can understand contexts, users and purposes. • I can develop a detailed design specification to guide my thinking • I can identify and solve my own design problems. • I can use research to identify and understand user needs. • I can take creative risks when making design decisions
Construction	<ul style="list-style-type: none"> • I can use a complex range of materials and components • I can use a broad range of manufacturing techniques (handcraft skills and machinery) • I can make use of specialist equipment to mark out materials • I can apply a range of finishing techniques, including those from art and design, to a broad range of materials including textiles, metals, polymers and
Textiles	<ul style="list-style-type: none"> • I can use a broad range of material joining techniques including stitching and adhesives • I can investigate and develop skills in modifying the appearance of materials e.g. dying and applique • I can understand the health and safety risks and asses
Cooking	<ul style="list-style-type: none"> • I can store, prepare and cook food safely and hygienically • I can select and prepare ingredients • I can use utensils and electrical equipment • I know how to taste, texture and smell to decide how to season dishes and combine ingredients • I can adapt and use my own recipes • I can cook a repertoire of predominantly savoury dishes to feed myself and others a healthy and varied diet I can understand that food is produced, processed and sold in different ways, e.g conventional and organic farming, fair trade • I can understand that people choose different types of food and that this may be influenced by availability, season, need, cost, where the food is produced, culture and religion