



DT Progression of Skills

Key Stage 1

	Nursery	Reception	Rec/ Year 1	Year 1/ 2	Year 2	End of Key Stage Expectations
Design	<ul style="list-style-type: none"> - Use various construction materials. - Beginning to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces. - Joins construction pieces together to build and balance. - Realises tools can be used for a purpose. 	<ul style="list-style-type: none"> - Constructs with a purpose in mind, using a variety of resources. - Uses simple tools and techniques competently and appropriately. - Selects appropriate resources and adapts work where necessary. - Selects tools and techniques needed to shape, assemble and join materials they are using. - They use and explore 	<ul style="list-style-type: none"> Can I think of some ideas of my own? Can I use pictures and words to plan? Can I design a product for myself following design criteria? 	<ul style="list-style-type: none"> Can I think of some ideas of my own? Can I explain what I want to do? Can I describe my design by using pictures, model mock-ups and words? Can I design a product for myself and others following design criteria? 	<ul style="list-style-type: none"> Can I think of ideas and plan what to do next? Can I choose the best tools and materials? Can I give a reason why these are best tools or materials? Can I describe my design by using pictures, diagrams, model mock-ups, words and ICT? Can I design a product for others following design criteria? 	<p>Design Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p>

Make		<p>a variety of materials, tools and techniques.</p> <p>- They represent their own ideas, thoughts and feelings through design and technology.</p>	<p>Can I explain what I am making?</p> <p>Can I select tools and equipment to cut, shape, join and finish?</p> <p>Can I choose the right materials?</p>	<p>Can I explain what I am making and why?</p> <p>Can I select tools and equipment to cut, shape, join and finish?</p> <p>Can I describe which tools I am using and why?</p> <p>Can I choose materials and explain why they are being used?</p>	<p>Can I explain what I am making and why my audience will like it?</p> <p>Can I join things (materials/ components) together in different ways?</p> <p>Can I choose materials and explain why they are being used depending on their characteristics?</p>	<p>Make</p> <p>Select from and use a range of tools and equipment to perform practical tasks such as cutting, shaping, joining and finishing</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p>
Evaluate			<p>Can I talk about my own work?</p> <p>Can I talk about existing products and say what is good and not so good about them?</p>	<p>Can I describe how existing products work?</p> <p>Can I talk about my own work linked to what I was asked to do?</p> <p>Can I talk about my own work and things that other people have done?</p>	<p>Can I describe what went well with my work?</p> <p>Can I evaluate what I would do differently if I did it again and why?</p> <p>Can I judge my work against the design criteria?</p>	<p>Evaluate</p> <p>Explore and evaluate a range of existing products</p> <p>Evaluate their ideas and products against design criteria</p>

Technical Knowledge

		<p>Construction: Can I say how to make products stronger? Can I use levers or slides in my work?</p> <p>Cooking and nutrition: Can I cut food safely? Can I describe the texture of foods? Can I wash their hands and make sure that surfaces are clean? Can I think of interesting ways of decorating food they have made, eg, cakes? Can I say what healthy foods are? Can I say where some food comes from?</p>	<p>Use of materials: Can I measure materials to use in a model or structure? Can I join material in different ways? Can I use joining, folding or rolling to make it stronger? Can I use levers or slides in my work?</p> <p>Cooking and nutrition: Can I describe the properties of the ingredients I am using and why it is important to be varied in my diet? Can I explain what it means to be hygienic? Can I keep a hygienic kitchen? Can I say where food comes from i.e. animals, underground, over ground etc?</p>	<p>Mechanisms: Can I join materials together as part of a moving product? Can I add a specific design to my product? Can I use axels and wheels in my work?</p> <p>Textiles: Can I measure textiles? Can I join textiles together to make something? Can I cut textiles? Can I explain why they chose a certain textile?</p>	<p>Technical knowledge Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms, such as levers, sliders, wheels and axles, in their products.</p> <p>Cooking and Nutrition Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from</p>
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End of KS Expectations:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home and school, gardens and playgrounds, the local community, industry and the wider environment.



DT Progression of Skills

Key Stage 2

	Year 3	Year 3/4	Year 4/5	Year 5/6	Year 6	End of Key Stage Expectations
Design	<p>Can I show that my design meets a range of requirements?</p> <p>Can I put together a plan which shows the order and also what equipment and tools I need?</p> <p>Can I describe my design using an accurately labelled sketch and words?</p>	<p>Can I show that my design meets a range of requirements?</p> <p>Can I put together a step-by-step plan which shows the order and also what equipment and tools I need?</p> <p>Can I describe my design using an accurately labelled sketch and words?</p> <p>Can I say how realistic my plan is?</p> <p>Can I take account of the ideas of others when designing?</p>	<p>Can I come up with at least one idea about how to create my product?</p> <p>Can I take account of the ideas of others when designing?</p> <p>Can I produce a plan and explain it to others?</p> <p>Can I suggest some improvements and say what was good and not so good about my original design?</p>	<p>Can I come up with a range of ideas after I have collected information?</p> <p>Can I take a user's view into account when designing?</p> <p>Can I produce a detailed step-by-step plan?</p> <p>Can I suggest some alternative plans and say what the good points and drawbacks are about each?</p> <p>Can I use cross sectional planning to show my design?</p> <p>Can I produce prototypes to show my ideas?</p>	<p>Can I use a range of information to inform my design?</p> <p>Can I use market research to inform plans?</p> <p>Can I work within constraints?</p> <p>Can I follow and refine my plan if necessary?</p> <p>Can I justify my plan to someone else?</p> <p>Do I consider culture and society in my designs?</p> <p>Can I use exploded diagrams to show my designs?</p> <p>Can I use computer aided designs to show my ideas?</p>	<p>Design 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</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p>

Make	Can I use equipment and tools accurately?	Can I use equipment and tools accurately?	Can I show I am conscience of the need to produce something that will be liked by others?	Can I explain why my finished product is going to be of good quality?	Can I use tools and materials precisely?	<p>Make Select from and use a wider range of tools and equipment to perform practical tasks, such as 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>
	Can I stop and think about how good my product is going to end up?	Can I tell if my finished product is going to be good quality?	Can I show a good level of expertise when using a range of tools and equipment?	Can I explain how my product will appeal to the audience?	Can I explain how my product will appeal to the audience?	
			Can I explain how my product will appeal to the audience?	Can I use a range of tools and equipment expertly?	Can I think about the aesthetic qualities of my work?	
				Can I use a range of tools and equipment expertly?	Can I think about the aesthetic qualities of my work?	
				Can I think about the functionality of my work?	Can I think about the functionality of my work?	

Evaluate	Can I say what I would change which made my design even better?	Have I thought of how I will check if my design is successful?	Can I begin to explain how I can improve my original design?	Do I keep checking that my design is the best it can be?	Can I test and evaluate my final product?	Evaluate 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
	Can I practise my evaluation skills by evaluating existing products?	Can I begin to explain how I can improve my original design? Can I practise my evaluation skills by evaluating existing products?	Can I evaluate my product, thinking of both appearance and the way it works? Can I practise my evaluation skills by evaluating existing products against set criteria?	Can I check whether anything could be improved? Can I evaluate appearance and function against the original criteria? Can I test and evaluate my final product? Can I say if my product is fit for purpose? Can I practise my evaluation skills by evaluating existing products against criteria which I have set?	Can I say if my product is fit for purpose? Can I evaluate what would improve it? Can I evaluate if different resources would have improved my product? Can I say if I would need more or different information to make it even better? Can I practise my evaluation skills by evaluating existing products against criteria which I have set?	

YEAR 3

Textiles:

Can I join textiles of different types in different ways?

Can I choose textiles both for their appearance and also qualities?

Cooking and nutrition:

Can I choose the right ingredients for a product?

Can I use equipment safely?

Can I make sure that my product looks attractive?

Can I describe how my combined ingredients come together?

Can I set out to grow plants such as cress and herbs from seed with the intention of using them for my food product?

Stiff and flexible sheet materials:

Can I use the most appropriate materials?

Can I work accurately to make cuts and holes?

Can I join materials?

YEAR 3/4

Textiles:

Can I think what the user would want when choosing textiles?

Can I think about how to make my product strong?

Can I devise a template?

Can I explain how to join things in a different way?

Cooking and nutrition:

Can I say what to do to be hygienic and safe?

Can I think what I could do to present my product in an interesting way?

Electrical & mechanical components:

Can I select the most appropriate tools and techniques to use for a given task?

Can I make a product which uses both electrical and mechanical components?

Can I use a simple circuit?

Can I use a number of components?

Can I add things to my circuits?

How have I altered my product after checking it?

Can I be confident about trying out new and different ideas?

YEAR 4/5

Stiff and flexible sheet materials:

Can I measure carefully so as to make sure I have not made mistakes?

Can I attempt to make my product strong?

Cooking and nutrition:

Can I describe what I do to be both hygienic and safe?

Can I present my product well?

Mouldable materials:

Can I take time to consider how I could have made my idea better?

Can I work at my product even though their original idea might not have worked?

Technical knowledge

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures

Understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages

Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors

Apply their understanding of computing to programme, monitor and control their products.

Cooking and Nutrition
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

<p>YEAR 5/6</p> <p>Electrical & mechanical components: Can I incorporate a switch into my product? Can I refine my product after testing it? Can I incorporate hydraulics and pneumatics? Can I use different kinds of circuit in my product? Can I think of ways in which adding a circuit would improve my product?</p> <p>Mouldable materials: Can I consider the use of the product when selecting materials? Can I say how my product meet all design criteria?</p> <p>Stiff and flexible sheet materials: Can I measure accurately enough to ensure that everything is precise? Can I ensure that my product is strong and fit for purpose?</p>	<p>YEAR 6</p> <p>Textiles: Can I think what the user would want when choosing textiles? Can I make my product attractive and strong? Can I make up a prototype first? Can I use a range of joining techniques? Can I think about how my product could be sold? Can I give considered thought about what would improve my product even more?</p> <p>Electrical and mechanical components: Can I use different kinds of circuit in my product? Can I think of ways in which adding a circuit would improve my product?</p> <p>Mouldable materials: Can I consider the use of the product when selecting materials? Can I say if my product meet all design criteria?</p>	<p>Technical knowledge Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products, such as gears, pulleys, cams, levers and linkages Understand and use electrical systems in their products, such as series circuits incorporating switches, bulbs, buzzers and motors Apply their understanding of computing to programme, monitor and control their products.</p> <p>Cooking and Nutrition 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</p>
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End of KS Expectations:

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment.