



DT Progression of Skills



Strand	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	- Teacher encourages pupils to generate own ideas and provide them with modelling materials. - Discuss what a product is used for, be shown how it works and be taught what materials it is made from. - Be given the target group and have their needs shared. From this, develop an understanding of the design criteria.	- Begin to draw on their own experience to help generate ideas and research conducted on criteria. - Begin to understand the development of existing products: What they are for, how they work, materials used. - Start to suggest ideas and explain what they are going to do. - Understand how to identify a target group for what they intend to design and make based on design criteria. - Begin to develop their ideas through talk and drawings. - Make templates and mock-ups of their ideas in card and paper.	- Start to generate ideas by drawing on their own and other people's experiences. - Begin to develop their design ideas through discussion, observation, drawing and modelling. Identify a purpose for what they intend to design and make. - Begin to identify a target group for what they intend to design and make based on design criteria. - Develop their ideas through talk and drawings 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. - Start to understand whether products can be recycled or reused. - Know to make drawings with labels when designing. - When planning, choose between a range of materials based on their function and aesthetics.	- Start to generate ideas, considering the purposes for which they are designing- link with Maths and Science. - Confidently make labelled drawings from different views 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 components according to function and aesthetic.	- Start to generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces. - 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. - Draw up a specification for their design - link with Maths and Science. - Use results of investigations, information sources, including ICT when developing design ideas. - With growing confidence select appropriate materials, tools and techniques. - Begin to understand how sustainable products are and whether they can be recycled/reused.	- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces. - 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. - Draw up a specification for their design- link with Maths and Science. - Plan the order of their work, choosing appropriate materials, tools and techniques. - Suggest alternative methods of making it if the first attempts fail. - Identify the strengths and areas for development in their ideas and products. - Know how much products cost to make, how sustainable and innovative they are and the impact products have beyond their intended purpose.



DT Progression of Skills



Make	- Construct with a purpose in mind, using a range of resources. - Select tools and techniques needed to shape, assemble and join materials they are using - Use simple tools and techniques competently and appropriately (e.g. french knitting). - Use mark-making equipment effectively. - Manipulate materials to achieve a planned effect	- Begin to make their design using appropriate techniques. - Begin to build structures, exploring how they can be made stronger, stiffer and more stable. - Explore and use mechanisms (levers and sliders). - With help, measure, mark out, cut and shape a range of materials. - Explore using tools e.g. scissors and a hole punch safely. - Begin to assemble, join and combine materials and components together using a variety methods e.g. gluing and taping. - Begin to use simple finishing techniques to improve the appearance of their product. - Demonstrate how to cut, shape and join fabric to make a simple product. Use basic sewing techniques.	- Begin to select tools and materials; use correct vocabulary to name and describe them. - With help measure, cut and score with some accuracy. - Assemble, join and combine materials in order to make a product. - Start to choose and use appropriate finishing techniques based on their own ideas.	- Select from a wider range of tools and techniques for making their product i.e. electrical components. - Explain their choice of tools and equipment in relation to the skills and techniques they will be using. - Start to understand that electrical systems have an input, process and output. - Know how simple electrical circuits and components can be used to create functional products. - Measure, mark out, cut, score and assemble components with more accuracy. - Start to work safely and accurately with a range of simple tools. - Start to think about their ideas as they make progress and be willing to change things if this helps them to improve their work.	- Select from a wider range of tools and techniques for making their product safely. - Know how to measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques. - Start to join and combine materials and components accurately in temporary and permanent ways. - Know how mechanical systems such as cams or pulleys or gears create movement. - Understand how to reinforce and strengthen a 3D framework. - Learn to use hand tools safely and appropriately e.g. a saw. - Demonstrate how to measure, tape or pin, cut and join fabric with some accuracy. - Use the method of applique to sew together two pieces of material.	- Select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately. - Select from and use a wider range of materials and components, including construction materials according to their functional properties and aesthetic qualities. - Measure and mark out more accurately. - Demonstrate how to use skills in using different tools and equipment safely and accurately with growing confidence. - Cut and join with accuracy to ensure a good-quality finish to the product. - Begin to use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.	- Use a kit to begin the construction of a motorised car. - With confidence, select appropriate materials, tools and techniques e.g. cutting, shaping, joining and finishing, accurately. - Measure and mark out accurately using an appropriate scale. - Confidently demonstrate how to use skills in using different tools safely and accurately. - Know how to reinforce and strengthen a 3D framework. - Cut and join with accuracy and precision to ensure a good-quality finish to the product. - Communicate that mechanical and electrical systems have an input, process and output. - Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT.
Evaluate	- With support from an adult, discuss whether their product meets its purpose. - Explore a range of existing products. - Discuss what they like about their product and what they dislike.	- Start to evaluate their product by discussing how well it works in relation to the purpose (design criteria). - When looking at existing products, explain what they like and dislike about products and why. - Begin to evaluate their products as they are developed, identifying strengths and possible	- Evaluate their work against their design criteria, deciding whether it has been met or not. - When looking at existing products, explain what features they like and dislike and how these can begin to inform their own ideas. - Evaluate their products as they are developed, identifying strengths and	- Start to evaluate their product against the original design criteria e.g. explain how well it meets its intended purpose. - When looking at existing products, confidently explain what features they like and dislike and how these can begin to inform their own ideas.	- Evaluate their products by carrying out appropriate tests. - Use existing products to generate ideas for their own products. - Start to evaluate their work both during and at the end of the assignment. - Be able to disassemble and evaluate familiar products and consider	- Start to evaluate a product against the original design specification and by carrying out tests. - Analyse existing products against criteria, using this to inform their own ideas. - Evaluate against their original criteria and suggest ways that their product could be improved.	- Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests. - Evaluate their work regularly and record this using drawings with labels. - Evaluate the key designs of individuals in design and technology has helped shape the world (e.g. engineers,



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		changes they might make.	possible changes they might make. - With confidence talk about their ideas, saying what they like and dislike about them.	- Begin to disassemble and evaluate familiar products and consider the views of others to improve them. - Learn about inventors (e.g. Thomas Edison) who developed ground-breaking products.	the views of others to improve them.	- Begin to evaluate the work of their peers. - Evaluate the key designs of individuals in design and technology which have helped shape the world.	Henry Ford and Karl Benz). - Begin to evaluate their products as they are developed, identifying strengths and possible changes they might make.
Food and nutrition	- Begin to understand that all food comes from plants or animals. - Begin to understand that everyone should eat fruit and vegetables every day.	- Begin to prepare simple dishes safely and hygienically, using a heat source. - Begin to understand how to use a range of techniques such as mixing and baking. - Understand that sweet treats are healthy in moderation and that each ingredient has its own nutritional worth e.g. butter is a good source of protein/fat in moderation.	- Understand that all food comes from plants or animals. - Know that food has to be farmed, grown elsewhere (e.g. home) or caught. - Understand how to name and sort foods into the five groups in 'The Eat well plate' - Know that everyone should eat at least five portions of fruit and vegetables every day. - Demonstrate how to prepare simple dishes safely and hygienically, without using a heat source. - Demonstrate how to use techniques such as cutting, peeling and grating.	- Understand 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 peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. - 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.' - Begin to know that to be active and healthy, food and drink are needed to provide energy for the body..	- 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 how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. - Understand the health benefits of different food groups from 'The Eat Well Plate'.	- Begin to understand how food is processed into ingredients that can be eaten or used in cooking. - Confidently use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. - Begin to understand that different food and drink contain different substances – nutrients, water and fibre – that are needed for health. - Begin to choose ingredients which reflect a good understanding of 'The Eat Well Plate' and the nutritional value of food items.	- Understand that seasons may affect the food available. - Understand how food is processed into ingredients that can be eaten or used in cooking. - Understand how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. - Know 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. - Apply the principles of 'The Eat Well Plate' when choosing ingredients.