

DT Whole School Plan 2021-2022

	Autumn	Spring	Summer
Nursery	<ul style="list-style-type: none"> • Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. • Explore different materials freely, in order to develop their ideas about how to use them and what to make. • Develop their own ideas and then decide which materials to use to express them. • Create closed shapes with continuous lines, and begin to use these shapes to represent objects. 		
Reception	<ul style="list-style-type: none"> • Explore, use and refine a variety of artistic effects to express their ideas and feelings. • Return to and build on their previous learning, refining ideas and developing their ability to represent them. • Create collaboratively, sharing ideas, resources and skills. 		
ELG	<ul style="list-style-type: none"> • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. • Share their creations, explaining the process they have used. 		
Activities	<ul style="list-style-type: none"> • Clay tea light holder 	<ul style="list-style-type: none"> • Kwanza African necklace • Origami dragons • Making junk models – a house for the little pigs 	<ul style="list-style-type: none"> • Use plants and leaves to make own paints • Make a model pirate ship
Year 1/2	Design and make puppets YR - Split pin skeletons	Fabric Bunting /Fabricate	Dips and dippers/ Sensational salads
	<p>Developing, planning and communicating ideas</p> <ul style="list-style-type: none"> •Can they think of ideas and plan what to do next? •Can they choose the best tools and materials? Can they give a reason why these are best? •Can they describe their design by using pictures, diagrams, models and words? <p>Breadth of study</p>	<p>Working with tools, equipment, materials and components to make quality products</p> <ul style="list-style-type: none"> •Can they join things (materials/ components) together in different ways? 	<p>Evaluating processes and products</p> <ul style="list-style-type: none"> •Can they explain what went well with their work? •If they did it again, can they explain what they would improve?

DT Whole School Plan 2021-2022

	<p>Cooking and nutrition</p> <ul style="list-style-type: none"> •Can they describe the properties of the ingredients they are using? •Can they explain what it means to be hygienic? •Are they hygienic in the kitchen? 	<p>Textiles</p> <ul style="list-style-type: none"> •Can they measure textile? •Can they join textiles together to make something? •Can they cut textiles? •Can they explain why they chose a certain textile? 	<p>Mechanisms</p> <ul style="list-style-type: none"> •Can they join materials together as part of a moving product? •Can they add some kind of design to their product? 	<p>Use of materials</p> <ul style="list-style-type: none"> •Can they measure materials to use in a model or structure? •Can they join material in different ways? •Can they use joining, folding or rolling to make it stronger? 	<p>Construction</p> <ul style="list-style-type: none"> •Can they make sensible choices as to which material to use for their constructions? •Can they develop their own ideas from initial starting points? •Can they incorporate some type of movement into models? •Can they consider how to improve their construction?
Year 3	Edible Garden	Let's Go Fly a Kite	Mechanical Posters		
	<p>Developing, planning and communicating ideas</p> <ul style="list-style-type: none"> •Can they show that their design meets a range of requirements? •Can they put together a step-by-step plan which shows the order and also what equipment and tools they need? •Can they describe their design using an accurately labelled sketch and words? •How realistic is their plan? 	<p>Working with tools, equipment, materials and components to make quality products</p> <ul style="list-style-type: none"> •Can they use equipment and tools accurately? 	<p>Evaluating processes and products</p> <ul style="list-style-type: none"> •Can they explain what they changed which made their design even better? 		
	<p>Breadth of study</p> <p>Cooking and nutrition</p> <ul style="list-style-type: none"> •Can they choose the right ingredients for a product? •Can they use equipment safely? •Can they make sure that their product looks attractive? •Can they describe how their combined ingredients come together? •Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product? 	<p>Textiles</p> <ul style="list-style-type: none"> •Can they join textiles of different types in different ways? •Can they choose textiles both for their appearance and also qualities? 	<p>Electrical and mechanical components</p> <ul style="list-style-type: none"> •Do they select the most appropriate tools and techniques to use for a given task? •Can they make a product which uses both electrical and mechanical components? •Can they use a simple circuit? •Can they use a number of components? 	<p>Stiff and flexible sheet materials</p> <ul style="list-style-type: none"> •Do they use the most appropriate materials? •Can they work accurately to make cuts and holes? •Can they join materials? 	<p>Mouldable materials</p> <ul style="list-style-type: none"> •Do they select the most appropriate materials? •Can they use a range of techniques to shape and mould? •Do they use finishing techniques?
Year 4	Great British Bread Bake Off	Cook Gruel	Battery Operated Lights		

DT Whole School Plan 2021-2022

	<p>Developing, planning and communicating ideas</p> <ul style="list-style-type: none"> •Can they put together a step-by-step plan which shows the order and also what equipment and tools they need? •Can they come up with at least one idea about how to create their product? •Do they take account of the ideas of others when designing? •Can they produce a plan and explain it to others? •Can they suggest some improvements and say what was good and not so good about their original design? <p>Breadth of study</p> <p>Cooking and nutrition</p> <ul style="list-style-type: none"> •Do they know what to do to be hygienic and safe? •Have they thought what they can do to present their product in an interesting way? <p>Textiles</p> <ul style="list-style-type: none"> •Do they think what the user would want when choosing textiles? •Have they thought about how to make their product strong? •Can they devise a template? •Can they explain how to join things in a different way? 	<p>Working with tools, equipment, materials and components to make quality products</p> <ul style="list-style-type: none"> •Can they tell if their finished product is going to be good quality? •Are they conscience of the need to produce something that will be liked by others? •Can they show a good level of expertise when using a range of tools and equipment? •Do they work at their product even though their original idea might not have worked? <p>Electrical and mechanical components</p> <ul style="list-style-type: none"> •Can they add things to their circuits? •How have they altered their product after checking it? •Are they confident about trying out new and different ideas? 	<p>Evaluating processes and products</p> <ul style="list-style-type: none"> •Have they thought of how they will check if their design is successful? •Can they begin to explain how they can improve their original design? •Can they evaluate their product, thinking of both appearance and the way it works? •Do they take time to consider how they could have made their idea better? <p>Stiff and flexible sheet materials</p> <ul style="list-style-type: none"> •Can they measure carefully so as to make sure they have not made mistakes? •How have they attempted to make their product strong? <p>Mouldable materials</p> <ul style="list-style-type: none"> •Can they use a range of advanced techniques to shape and mould? •Do they use finishing techniques, showing an awareness of audience?
Year 5	<p align="center">Plants and Flowers</p> <p align="center">Alexander Calder and David Oliveira</p> <p>Developing, planning and communicating ideas</p> <ul style="list-style-type: none"> •Can they come up with a range of ideas after they have collected information? •Do they take a user's view into account when designing? •Can they produce a detailed step-by-step plan? •Can they suggest some alternative plans and say what the good points and drawbacks are about each? 	<p align="center">Global Food</p> <p>Working with tools, equipment, materials and components to make quality products</p> <ul style="list-style-type: none"> •Can they explain why their finished product is going to be of good quality? •Can they explain how their product will appeal to the audience? •Can they use a range of tools and equipment expertly? •Do they persevere through different stages of the making process? 	<p align="center">Felt Phone Cases</p> <p>Evaluating processes and products</p> <ul style="list-style-type: none"> •Do they keep checking that their design is the best it can be? •Do they check whether anything could be improved? •Can they evaluate appearance and function against the original criteria?

DT Whole School Plan 2021-2022

	<ul style="list-style-type: none"> • Can they show a good level of expertise when using a range of tools and equipment? • Do they work at their product even though their original idea might not have worked? 				
	<p>Breadth of study Cooking and nutrition</p> <ul style="list-style-type: none"> • Can they describe what they do to be both hygienic and safe? • How have they presented their product well? 	<p>Textiles</p> <ul style="list-style-type: none"> • Do they think what the user would want when choosing textiles? • How have they made their product attractive and strong? • Can they make up a prototype first? • Can they use a range of joining techniques? • Can they devise a template? 	<p>Electrical and mechanical components</p> <ul style="list-style-type: none"> • Can they incorporate a switch into their product? • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics? 	<p>Stiff and flexible sheet materials</p> <ul style="list-style-type: none"> • Are their measurements accurate enough to ensure that everything is precise? • How have they ensured that their product is strong and fit for purpose? 	<p>Mouldable materials</p> <ul style="list-style-type: none"> • Are they motivated enough to refine and further improve their product using mouldable materials? • Can they use a range of advanced techniques to shape and mould? • Do they use finishing techniques, showing an awareness of audience?
Year 6	<p align="center">Super seasonal cooking</p> <p>Developing, planning and communicating ideas</p> <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 follow and refine their plan if necessary? • Can they justify their plan to someone else? • Do they consider culture and society in their designs? • Do they take a user's view into account when designing? • Can they produce a detailed step- by-step plan? • Can they suggest some alternative plans and say what the good points and drawbacks are about each? 	<p align="center">Wildlife Birds</p> <p>Working with tools, equipment, materials and components to make quality products</p> <ul style="list-style-type: none"> • Can they use tools and materials precisely? • Do they change the way they are working if needed? • Can they use a range of tools and equipment expertly? 	<p align="center">Marbulous Structures</p> <p>Evaluating processes and products</p> <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? • Did they consider the use of the product when selecting materials? 		

DT Whole School Plan 2021-2022

	<p>Breadth of study</p> <p>Cooking and nutrition</p> <ul style="list-style-type: none">•Can they explain how their product should be stored with reasons?•Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?•Can they describe what they do to be both hygienic and safe?•How have they presented their product well?	<p>Textiles</p> <ul style="list-style-type: none">•Have they thought about how their product could be sold?•Have they given considered thought about what would improve their product even more?• Do they think what the user would want when choosing textiles?• How have they made their product attractive and strong?• Can they make up a prototype first?• Can they use a range of joining techniques?	<p>Electrical and mechanical components</p> <ul style="list-style-type: none">•Can they use different kinds of circuit in their product?•Can they think of ways in which adding a circuit would improve their product?•Can they incorporate a switch into their product?• Can they refine their product after testing it?• Can they incorporate hydraulics and pneumatics?	<p>Stiff and flexible sheet materials</p> <ul style="list-style-type: none">•Can they justify why they selected specific materials?•How have they ensured that their work is precise and accurate?•Can they hide joints so as to improve the look of their product?• Are their measurements accurate enough to ensure that everything is precise?• How have they ensured that their product is strong and fit for purpose?	<p>Mouldable materials</p> <ul style="list-style-type: none">•Can they justify why the chosen material was the best for the task?•Can they justify design in relation to the audience?• Are they motivated enough to refine and further improve their product using mouldable materials?
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