
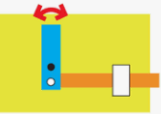
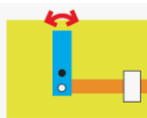


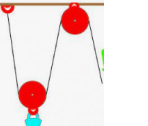


D&T is woven into our LMTW curriculum topics; this ensures children understand key concepts and knowledge around the design and evaluation process and have the opportunity to apply skills to different contexts; the topics also ensure the children can see links to the real world and to other curriculum subjects. We plan for enrichment days, visits and visitors so the children see the application of the D&T process in real life contexts. To ensure full coverage and progression for each year group, we have a two year rolling programme using the D&T Association 'Projects On A Page' (POAP) and have half-termly 'technology days'. This approach helps children to retain knowledge whilst practicing and developing practical skills.

Autumn Term 2023		
	Autumn 1	Autumn 2
Nursery	<p>N1: Explore a range of materials and tools through continuous provision</p> <p>N2: Show a preference for a dominant hand Develop their own ideas and then decide which materials to use to express them</p>	<p>N1: Explore materials with different properties using all their senses to investigate them</p> <p>N2: Shape and join materials; combine and mix ingredients. Explore collections of materials with similar and/or different properties. Explore different materials freely to develop their ideas about how to use them and what to make</p>
Puffins R	<ul style="list-style-type: none"> Create collaboratively, sharing ideas, resources and skills To identify which materials would be the most suitable to make a large model 	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques Take an active role in designing and creating biscuits for the whole class
Puffins 1	<p>'Unity in the Community' Enrichment: Through the topic, pupils will be introduced to how important design technology is to create strong and stable structures, observing a range of homes in their local area and using what they have found to design and make a model of a home that a new neighbour would like to live in.</p> 	<p>POAP</p> <p>Aspect of D&T: Mechanisms</p> <p>Focus: Sliders & Levers A</p>
Choughs 2	<p>'Light Up the world'</p> <p>POAP</p> <p>Aspect of D&T: Textiles</p> <p>Focus: Templates and Joining Techniques A</p>	<p>The Visionary 'Out and About' (LOs From Light up the World') Pupils will develop skills needed in order to design and make a simple moving object, focusing on basic sliders and levers. They will be introduced to vocabulary such as mechanism, lever and slider and explore different ways these can be made with simple materials, tools and techniques. Pupils will be familiarised with some early safety tips such as asking adults to cut or slice cardboard with sharp knives or cutters. They will use 'makedo' tools to cut cardboard independently.</p> <p>Skills Development Task- Sliders and Levers 2</p> <p>Concepts</p> <p>NC - Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> <p>NC - Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>NC - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</p> <p>NC – Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products</p> <p>Design and make a pop-up leaflet about Ada Lovelace</p> 
Choughs 3 Choughs 4	<p>POAP</p> <p>Aspect of D&T: Structures</p> <p>Focus: Shell Structures</p>	<p>Use their prior knowledge of sliders and levers to make pop up/ moving leaflets of increasing complexity. Evaluate and critique each other's' work and make improvements. Coach Y2 children using mistakes/ successes they have made.</p> <p>NC- 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>NC- Understand and use mechanical systems in their products</p>

		<p>Dt25 Communicate, design ideas in different ways e.g. discussion, annotated sketches, cross-sectional diagrams and prototypes</p> <p>Dt26 Selecting appropriate tools and techniques, name and describe them</p> <p>Dt27 Measure, mark, cut out and shape a range of materials and assemble, join and combine components and materials with increasing accuracy</p> <p>D30 Evaluate work, adapting and improving through the views of others to improve their work</p>
<p>Razorbills 5</p> <p>Razorbills 6</p>	<p>The Rescuers- 'Heroes of The Titanic'</p> <div> <p>POAP</p> <p>Aspect of D&T: Structures</p> <p>Focus: Frame Structures</p> </div>	<p>'Mission Control'- Earth and Beyond</p> <p>Pupils will be using The 'Extraordinaires' Spaceman project in this unit. Pupils will have extensive experience of the processes involved in researching, designing, making and evaluating for a range of products for a variety of users. In this unit, pupils are required to consider the needs of a real-life Extraordinaire. They will need to think about the impact their product has beyond its intended purpose; how will work with the rest of the Spaceman's equipment and in his limited workspace? Pupils will also need to address the relationship between the product's features and its functionality.</p> <p>Concepts</p> <p>NC - 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>NC - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>NC - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately</p> <p>NC - 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> <p>NC - Investigate and analyse a range of existing products</p> <p>NC - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>Design and make a model of a time-keeping device suitable for a spaceman</p>

Spring Term 2024		
	Spring 1	Spring 2
Nursery	<p>N1: Build independently with a range of appropriate resources. Manipulate and play with different materials</p> <p>N2: Use a comfortable grip with good control</p> <p>Explore how things work. Join different materials and explore different textures</p>	<p>N1: Use their imagination as they consider what they can do with different materials</p> <p>N2: Choose the right resources to carry out their own plan</p> <p>Explore light sources</p>
Puffins R	<p>Explore using construction kits with moving parts eg hinges. Explore Makedo tools and cardboard.</p> <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 	<p>Join two pieces of card with a split pin or 'Makedo' nail to make a hinge or joint</p> <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 processes they have used
Puffins 1	<p>'Come Fly with Me'- Arctic Circle</p> <p>Pupils will develop skills needed in order to design and make a simple moving object, focusing on basic sliders and levers. They will be introduced to vocabulary such as mechanism, lever and slider and explore different ways these can be made with simple materials, tools and techniques. Pupils will be familiarised with some early safety tips such as asking adults to cut or slice cardboard with sharp knives or cutters. Children will get the opportunity to use simple cutting tools independently (eg using the 'Makedo' construction tools)</p> <p>Skills Development Task Mechanisms- Sliders and Levers 1</p> <p>Concepts</p> <p>NC - Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products</p> <p>NC - Design purposeful, functional, appealing products for themselves and other users based on design criteria</p> 	<p>'Royal Patrons'</p> <div> <p>POAP</p> <p>Aspect of D&T: Structures</p> <p>Focus: Freestanding Structures (A)</p> </div>

	<p>NC - Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>NC - Select from and use a range of tools and equipment to perform practical tasks</p> <p>NC - Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products</p> <ul style="list-style-type: none"> Design, make and evaluate a moving picture which uses a simple mechanism (slider or lever) and be made from card <p>Design, make and evaluate a moving picture to accompany a fact sheet on an animal that lives in the Arctic.</p> <p>Design Technology - Cooking and Nutrition</p> <ul style="list-style-type: none"> Use the basic principles of a healthy and varied diet to prepare dishes (NC) Understand where food comes from (NC)  <p>Core 1 Unit 1 Lesson 1: Healthy Eating – Vote Green!</p> <p>Concepts</p> <ul style="list-style-type: none"> Learn about where vegetables and fruit grows Understand the social aspect of eating food together Know that making good choices about food will improve their health and well-being <p>Core 1 Unit 1 Lesson 2: Healthy Eating - Meat Eaters (within Come Fly With Me! Arctic Circle)</p> <p>Concepts</p> <ul style="list-style-type: none"> Know what constitutes a healthy diet (including understanding calories and other nutritional content) Understand the need for protein as part of a balanced diet <p>Core 1 Unit 1 Lesson 3: Healthy Eating - Party Time!</p> <p>Concepts</p> <ul style="list-style-type: none"> Know the principles of planning and preparing a range of healthy meals Apply their knowledge of healthy eating to plan a menu for a themed party 	
Choughs 2	<p>‘Window on the World’</p> <p>‘Saxon King’</p> <p>Pupils will build on their knowledge of how to create strong and stable structures; they will design, build, test and evaluate a structure to hold the greatest weight. Pupils will need to carefully consider the purpose of their product (eg holding the heaviest object) and will work through some problem solving in order to achieve the strongest structure.</p> <p>Concepts</p> <p>NC - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</p> <p>NC - Build structures, exploring how they can be made stronger, stiffer and more stable</p> <ul style="list-style-type: none"> Design, make and test a structure to hold a heavy weight 	<p>‘Athens V Sparta’</p> <div> <p>POAP</p> <p>Aspect of D&T: Food</p> <p>Focus: Preparing Fruit and Vegetables C</p> </div>
Choughs 3 Choughs 4	<p>(Skills from Athens V Sparta)</p> <p>In Pathfinders, pupils learnt that good design is an important component in the construction of strong structures. In this unit, pupils will discover how a strong structure and an accurate mechanism can be combined to make a catapult. Pupils will need to carefully consider the purpose of their product (eg catapulting the furthest distance) and include some key features to allow it to work. They will also need to work through processes of problem solving in order to achieve the best firing mechanism.</p> <p>Skills Development Task- Mechanisms- Structures</p> <p>Concepts</p> <p>NC - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately</p> <p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <ul style="list-style-type: none"> Design, make and evaluate a catapult.  	<div> <p>POAP</p> <p>Aspect of D&T: Food</p> <p>Focus: Healthy and Varied Diet</p> </div>

Razorbills 5 Razorbills 6	<p>‘I have a Dream’ Pupils will draw on the knowledge and skills learn in previous pathways to create a useable and aesthetically pleasing textile product. They will use sewing skills to join more than one piece of fabric together using more complex stitches, as well as have potential opportunity to use a sewing machine. They will need to stuff and secure their cushion so that it is comfortable for someone to use.</p> <p>Skills Development Task- Textiles</p> <p>Concepts NC - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design NC - 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> <ul style="list-style-type: none"> Make a cushion following a pattern <div data-bbox="261 636 961 806"> <p>POAP</p> <p>Aspect of D&T: Textiles</p> <p>Focus: Combining Different Fabric Shapes</p> </div>	<p>‘You’re Not Invited’ Pupils will be using The Extraordinaires Soldier project in this unit. Pupils will have extensive experience of the processes involved in researching, designing, making and evaluating for a range of products for a variety of users. In this unit, pupils are required to consider the needs of a real-life Extraordinaire. They will need to think about the impact their product has beyond its intended purpose; how will work with the rest of the Soldier’s equipment? Pupils will also need to address the relationship between the product’s features and its functionality.</p> <p>Concepts NC - 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 NC - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design NC - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately NC - 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 NC - Investigate and analyse a range of existing products NC - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <p>Design and make a sleeping place suitable for a soldier</p>
------------------------------------	--	---

Summer Term 2024		
	Summer 1	Summer 2
Nursery	<p>N1: Explore being creative with a wide range of materials</p> <p>N2: Develop their own ideas and then decide which materials to use to express them</p>	<p>N1: Make simple models which express their feelings; start to develop pretend play, pretending that one object represents another.</p> <p>N2: Make imaginative and complex ‘small worlds’ with blocks and construction kits Explore different materials freely, in order to develop their ideas about how to use them and what to make</p>
Puffins R		<p>Explore a range of fabrics and materials and experiment with joining them</p> <ul style="list-style-type: none"> To identify textures of materials to compare and contrast To be able to talk about what they see and then use this to inspire a make of their own To understand some of the processes involved in designing and making a particular item
Puffins 1	<p>‘Never Eat Shredded Wheat’</p> <div data-bbox="261 1394 961 1564"> <p>POAP</p> <p>Aspect of D&T: Food</p> <p>Focus: Preparing Fruit and Vegetables A</p> </div>	<p>‘Going Wild’ In this area of design technology, pupils will be familiarised with a range of fabrics and how they can be joined together with both glue and with needle and thread. Pupils will learn how to create simple stitches to join 2 pieces of fabric together and then add other materials to create features. They will need to think about what they are making so that it relates to the brief.</p> <p>Skills Development Task- Textiles</p> <p>Concepts NC - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) NC - Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <ul style="list-style-type: none"> Design and make finger puppets for the nursery rhyme, ‘Two Little Sparrows’
Choughs 2	<p>‘Lightning Speed’ NC - Design purposeful, functional, appealing products for themselves and other users based on design criteria NC - Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology NC - Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</p>	<p>‘Cry Freedom’</p> <div data-bbox="1546 1791 2243 1961"> <p>POAP</p> <p>Aspect of D&T: Mechanisms</p> <p>Focus: Wheels and Axles A</p> </div>

	<p>NC - Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>NC - Understand the important of exploring and evaluating a range of existing products</p> <p>NC - Evaluate their ideas and products against design criteria</p>	
<p>Choughs 3</p> <p>Choughs 4</p>	<p>Pupils will be using The Extraordinaires Evil Genius project in this unit. They will be familiar with the initial processes of studying the persona of the user, their needs analysis and what it is they are designing. In Adventurers, pupils will be expected to work through the stages in more detail, for example, when thinking of ways to improve, they will need to analyse a specific feature of their design and describe how it could be made better. Pupils will need to consider how they will make their product not only functional but also look attractive to the user.</p> <p>Concepts</p> <p>NC - 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>NC - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>NC - Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately</p> <p>NC - 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> <p>NC - Investigate and analyse a range of existing products</p> <p>NC - Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work</p> <ul style="list-style-type: none"> Design and make a model of a new communications device for the Evil Genius 	<p>POAP</p> <p>Aspect of D&T: Mechanical Systems</p> <p>Focus: Pneumatics</p>
<p>Razorbills 5</p> <p>Razorbills 6</p>	<p>'Global Warning'</p> <p>Pupils will design and make a board game based on learning about pollution and waste. They will evaluate existing games before designing and making a prototype of their game in small 'business groups'. Once complete, they will present and demonstrate their game.</p> <p>Concepts</p> <p>NC - 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>NC - Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p> <p>NC - 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> <p>NC - Investigate and analyse a range of existing products</p> <p>To design and make a prototype board game on pollution and waste using existing board games as research</p>	<p>'Time Team'</p> <p>POAP</p> <p>Aspect of D&T: Food</p> <p>Focus: Celebrating Culture and Seasonality A</p>