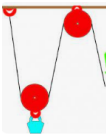


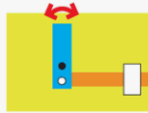
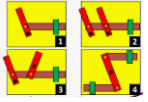


D&T is woven into our LMTW curriculum topics; this ensures children understand key concepts and knowledge around the design and evaluation process and have the opportunity to apply skills to different contexts; the topics also ensure the children can see links to the real world and to other curriculum 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 2024		
	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	<p>Use a range of materials to explore and experiment with including joining with clips, pegs and glue.</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 process they have used Create collaboratively, sharing ideas, resources and skills 	<ul style="list-style-type: none"> To design a new lanyard with clear information and space for a photograph To be able to talk about preferences and design a pizza for themselves To identify what someone else prefers and design specifically for them <p>Key Vocabulary model, badge, lanyard, design, photograph, I.D., words, preference, cook, share, favourite, junk modelling, gift ENRICHMENT through continuous provision</p>
Puffins 1	<p>Happily Ever After Pupils will be using The Extraordinaires Fairy project in this unit. They will be introduced to the 'persona' of the Fairy to help them think more like the end user who they are designing for. Pupils will work through the stages of the design process, from research, design, make and evaluation. They will need to research products that are already available on the market and then adapt their ideas to ensure they think of something original but useful and useable by the user they are designing for. Pupils will look at simple ways to improve their design and be introduced to ways in which they can analyse their work and also that of their peers.</p> <p>Concepts 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) NC - Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics NC - Understand the important of exploring and evaluating a range of existing products NC - Evaluate their ideas and products against design criteria</p> <ul style="list-style-type: none"> Design and make a prototype of a bag suitable for the client (Fairy) to carry things in 	<p>'Help is at Hand'</p> <div> <p>POAP</p> <p>Aspect of D&T: Mechanisms</p> <p>Focus: Sliders & Levers Aii</p> </div>
Choughs 2	<p>'Land Ahoy' Pupils will be using The Extraordinaires Pirate project in this unit. They will be introduced to the 'persona' of the Pirate to help them think more like the end user who they are designing for. Pupils will work through the stages of the design process, from research, design, make and evaluation. They will need to research products that are already available on the market and then adapt their ideas to ensure they think of something original but useful and useable by the user they are designing for. Pupils will look at simple ways to improve their design and be introduced to ways in which they can analyse their work and also that of their peers</p> <p>Concepts 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</p>	<p>'Zero to Hero' 'Jurassic Hunter' In this unit, pupils will design and make a gift for one of the famous people they have studied within the Zero to Hero unit. Pupils will need to consider the answers to three key questions in the design phase of their task:- Who is the gift for? How does the design and function of the gift suit the person it is intended for? Where and when might this person use this gift?</p> <p>Concepts 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 wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</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 - 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 importance of exploring and evaluating a range of existing products</p> <p>NC - Evaluate their ideas and products against design criteria</p> <ul style="list-style-type: none"> Design and make a prototype of a remote control suitable for the client (Pirate) to use. 		<ul style="list-style-type: none"> Design and make a useful gift for one of the famous people in the Zero to Hero unit <p>LO to generate, develop, model and communicate ideas through talking, drawing, templates, mock-ups and where appropriate, Information and communication technology</p>
<p>Choughs 3</p> <p>Choughs 4</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>		<div> <p>POAP</p> <p>Aspect of D&T: Electrical Systems</p> <p>Focus: Simple Circuits and Switches</p> </div>
<p>Razorbills 5</p> <p>Razorbills 6</p>	<p>'A World of Bright Ideas'</p> <p>Concepts</p> <p>NC - Understand how key events and individuals in design and technology have helped shape the world</p> <ul style="list-style-type: none"> To understand the meaning of the term 'copyright' and learn about why it is important To know about and understand what a patent is To know about and understand what a trademark is To design a new brand for a range of greetings cards <p>Skills Development Task- Mechanisms and Structures 2</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>NC - Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages)</p> <p>NC - Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</p> <ul style="list-style-type: none"> Design, make and evaluate a three wheeled 'racer' <p>Skills</p> <p>Dt44 Explore alternative ways of making their product, if first attempts fail</p> <p>Dt45 Check work as it develops and modify as necessary</p> <p>Dt49 Plan what they have to do, suggesting a sequence of actions and alternatives if needed</p> <p>Dt50 Choose how to communicate design ideas as they develop, considering use and purpose</p> <p>Dt51 Select from a wide range of tools and equipment to perform practical tasks accurately</p> <p>Core 1 Unit 2 Lesson 1: Food Technology- Food Choices – Secret Eaters</p> <p>Concepts</p> <ul style="list-style-type: none"> Know what constitutes a healthy diet (including understanding calories and other nutritional content) Know about the different food groups and their related importance as a part of a balanced diet Develop an awareness of their own dietary needs 	  	<p>'In your Element' 'Pharaoh Queen'</p> <div> <p>POAP</p> <p>Aspect of D&T: Food</p> <p>Focus: Celebrating Culture and Seasonality D</p> </div>



Spring Term 2025		
	Spring 1	Spring 2
Nursery	N1: Build independently with a range of appropriate resources. Manipulate and play with different materials N2: Use a comfortable grip with good control Explore how things work. Join different materials and explore different textures	N1: Use their imagination as they consider what they can do with different materials N2: Choose the right resources to carry out their own plan Explore light sources
Puffins R	'Come Fly with Me' - Asia <ul style="list-style-type: none"> To know that Chinese dragons are an important feature of Chinese culture and make their own model using bright colours To identify some features of Chinese dress and design their own Chinese style outfit To know what a diva lamp is for Key Vocabulary fold, stick, colour, shape, compare, feature, dragon, Chinese, colour, bright, traditional, diva lamp, salt dough, Diwali ENRICHMENT through continuous provision	
Puffins 1	'Come Fly with Me' - Asia <div> POAP Aspect of D&T: Structures Focus: Freestanding Structures Aii </div>	'Powhatan People'
Choughs 2	'That's All Folks!' Pupils will design and make a puppet focusing on sliders and levers for moving arms or legs that can be used in a stop motion animation. 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.  Skill development: Sliders and Levers 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) NC – Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products	'Lindow Man' <div> POAP Aspect of D&T: Mechanisms Focus: Wheels and Axles B </div>
Choughs 3 Choughs 4	Pupils will embed and build on previous knowledge of how to construct and use levers by integrated them with linkages. They will explore a range of lever and linkage types and their methods of construction. In this second part, pupils will design a 'puppet' with a scissor mechanism that could be used in a stop-motion animation. Thoughtful and considered design is needed in this task.  Skills Development Task- Mechanisms- Levers and linkages 2 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 - Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages) <ul style="list-style-type: none"> Design, make and evaluate a prop or model to be used in an animation. 	<div> POAP Aspect of D&T: Mechanical Systems Focus: Levers and Linkages </div>

Razorbills 5 Razorbills 6	<p>'Come Fly With Me- America'</p> <p>Pupils will sketch, design using annotations and then make a dreamcatcher using models and video presented to them as inspiration. They will find out about the origins of the dreamcatcher and recognise some of the key design features needed. Before making, pupils will need to identify the materials and colours they will use. ENRICHMENT</p> <p>Skills Development Task- Mechanisms - Structures 1</p> <p>Previously, pupils have learnt how specific mechanisms play a role in constructing strong and useful structures. In this unit, pupils will work through several processes to initially build a strong frame and then join these frames together to form a bridge. Pupils will be required to consider not only their design but also the materials, tools and techniques they will use in order to complete their project.</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>NC - Apply their understanding of how to strengthen, stiffen and reinforce more complex structures</p> <ul style="list-style-type: none"> • Create a frame structure • Join up frames to create a bridge 	<p>'Wars of the World'</p> <p>Through science, pupils have experimented with designing, making and testing a range of electrical circuits with different components. Now, they will implement this knowledge and these skills to produce a circuit that has a clear purpose. Pupils will need to consider the features of their circuit and how it relates to its functionality. They will also address that their design has impact in other ways.</p> <p>Skills Development Task- Electronics 1</p> <p>Concepts</p> <p>NC - Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</p> <p>NC - Apply their understanding of computing to program, monitor and control their products</p> <ul style="list-style-type: none"> • Design, make and evaluate a device to send Morse Code signals <div data-bbox="1507 506 2208 678"> <p>POAP</p> <p>Aspect of D&T: Electrical Systems</p> <p>Focus: More Complex Circuits and Switches</p> </div>
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Summer Term 2025		
	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</p> <p>Explore different materials freely, in order to develop their ideas about how to use them and what to make</p>
Puffins R		<p>'What on Earth...?'</p> <ul style="list-style-type: none"> • To design and make a clay pot with the purpose of growing seeds • To identify the features of a range of fabrics and talk about which they consider to be pretty • To use their imagination when designing and making a model of a giant • To know that some materials can be repurposed and reused to make something else • To understand some of the processes involved in designing and making a particular item <p>Key Vocabulary mould, design, make, model, pattern, texture, gift wrap, fabric, plant pot, clay</p>
Puffins 1	<p>'Naughty Elephants Squirt Water'</p>	<p>'What on Earth...?'</p> <div data-bbox="1543 1455 2243 1627"> <p>POAP</p> <p>Aspect of D&T: Food</p> <p>Focus: Preparing Fruit and Vegetables Aii</p> </div>
Choughs 2	<p>'Picture Our Planet'</p> <p>POAP task – textiles- sew a button or sew a bag or bookmark</p> <p>Link to village sewing club?</p>	<p>'Viking Warrior'</p> <div data-bbox="1543 1759 2243 1927"> <p>POAP</p> <p>Aspect of D&T: Textiles</p> <p>Focus: Templates and Joining Techniques</p> </div>



<p>Choughs 3 Choughs 4</p>	<p>Pupils already have some experience of working with textiles and combining two pieces of materials together using needle and thread. In this unit, pupils will need to use sewing skills to make a soft toy, therefore they will learn how to use stuffing to pad out two pieces of fabric. They will also need to consider how their toy looks as well as being robust enough for a toddler to play with.</p> <p>Skills Development Task- Textiles</p> <p>Concepts</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> <ul style="list-style-type: none"> Design and make an animal soft toy, aimed at toddlers, in association with the Scottish Wildlife Trust 		<div> <p>POAP</p> <p>Aspect of D&T: Textiles</p> <p>Focus: 2D Shape to 3D Product</p> </div>
<p>Razorbills 5 Razorbills 6</p>	<p>'Full of Beans'</p> <p>Through science, pupils have experimented with designing, making and testing a range of electrical circuits with different components. Now, they will implement this knowledge and these skills to produce a circuit that has a clear purpose. Pupils will need to consider the features of their circuit and how it relates to its functionality. They will also address that their design has impact in other ways.</p> <p>Skills Development Task- Electronics 2</p> <p>Concepts</p> <p>NC - Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors)</p> <p>NC - Apply their understanding of computing to program, monitor and control their products</p> <ul style="list-style-type: none"> Design, make and evaluate a traffic control system 		<p>'British Bulldog'</p> <div> <p>POAP</p> <p>Aspect of D&T: Mechanical Systems</p> <p>Focus: Pulleys or Gears</p> </div>