



Design and Technology Progression Document

Intent

Through our curriculum we aim to develop children's interest in the creative processes of Design and Technology. The children will design and make products for a purpose within a variety of contexts. We aim to enable children to become creative problem-solvers. Children will learn how to think and plan in a logical sequence. Through reflection and evaluation of past and present Design and Technology, children will begin to develop a critical understanding of its uses and make suggestions of how to improve products.

EYFS

- Progress towards a more fluent style of moving, with developing control and grace.
- Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
- Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.
- 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.
- Use a range of small tools, including scissors, paintbrushes and cutlery.
- 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.

National Curriculum for Design and Technology

Key stage 1

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 [for example, the home and school, gardens and playgrounds, the local community, industry and the wider environment]. When designing and making, pupils should be taught to:

Design

- design purposeful, functional, appealing products for themselves and other users based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
- select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- explore and evaluate a range of existing products
- evaluate their ideas and products against design criteria

Technical knowledge

- build structures, exploring how they can be made stronger, stiffer and more stable
- explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.

		Knowledge and Skills	Visits & Visitors	Key Vocab	End Points Challenge For Higher Achievers	Supporting End Points For SEND
Cooking and Nutrition	Year 1 Autumn 1 Thank you Hospitality and Hope – Fruit Salad	<ul style="list-style-type: none"> Explore the Eatwell Plate; fruit is an important part of a balanced diet. Find out where fruit comes from. Investigate and analyse pre-packed fruit salads. Design a fruit salad Wash, chop, cut and arrange fruit to create the fruit salad. Taste the fruit salad, evaluate it. Suggest improvements to the fruit salad 	Hospitality and Hope	Evaluate, product, design, fruit, packaging, environment, fresh, appealing, slice, peel, chop, prepare, review, questionnaire	Pupils will be supported through; opportunities to suggest what to do next. explanation of their choice of tools and equipment.	Pupils will be supported through; more guided instruction by breaking down tasks into smaller parts. the use of pictures and words to describe what they want to do. talking about their own and other people's work in simple terms. worked examples that model and exemplify key techniques or aspects of techniques.
	Year 2 Autumn 1 Thank you Hospitality and Hope – Harvest Soup	<ul style="list-style-type: none"> Review knowledge of healthy diet Find out where vegetables come from Investigate which vegetables are in season. Investigate and analyse a range of tinned/fresh soup. Explore tastes, textures and colour of soups. Explain the need for hygiene and safety when cooking. Design a recipe for soup Wash, peel, chop and cook vegetables to create soup. Devise questionnaire to ask adults to evaluate soup. Evaluate the feedback, how could the soup be improved 		Healthy, diet, prepare, vegetables, seasonality, eat well plate, tally, pictogram, portion, hygiene, safety, peel, chop, evaluate, questionnaire		
Design, Make and Evaluate a Greeting Card	Year 1 Autumn 2 Christmas Card Designers	<ul style="list-style-type: none"> Explore and evaluate a range of shop bought Christmas cards Identify the criteria for an appealing Christmas card. Plan and design an individual Christmas card. Decide which techniques /medium/resources will be used to make card Explore digital technology to create mock ups of cards Create card and modify design where necessary. Select the tools and medium to create card and use them safely. Evaluate design against the criteria for creating an appealing card. 		Evaluate, discuss, summarise, criteria, stable, colourful, festive, embellishments, greeting, plan, design, mock up, modify, develop, purposeful, appealing, functional, product	the promotion of extracurricular DT and STEM clubs. communication with parents about skills and talents.	more structured tasks, for example by limiting the choice of materials and confining practice to preliminary models and sketches rather than 'finished' final outcomes. Activities that being by focusing on what pupils already know before gradually

	<p>Year 2 Autumn 2</p> <p>Designing Christmas Cards with Moving Parts</p>	<ul style="list-style-type: none"> • Explore and analyse a range of cards with moving parts. • Identify a set of design criteria for a card with a moving part. • Build simple moving parts; levers and sliders • Select resources to create moving parts. • Explore tools and resources to decide on a moving part for card. • Plan and design card. • Create Christmas card, make ongoing modifications where necessary. • Evaluate the end product against the design criteria with a focus on the moving part. • Identify improvements and record them. 		<p>Explore, evaluate, products, design, plan, criteria, tools, equipment, cutting, shaping, joining, finishing, sliders, levers, moving parts, appealing, techniques, modify, develop</p>		<p>including newer knowledge.</p> <p>a series of practice tasks that gradually increase pupils' independence and build skills over time.</p>
<p>Design, Make and Evaluate a product – China Project</p>	<p>Year 1 Spring 1</p> <p>Toy Makers</p>	<ul style="list-style-type: none"> • Explore and analyse paper Chinese dragon toys. • Identify purpose, and design criteria. • Make decisions of which animal the toy will be based on. • Identify and select resources needed to make toy. • Plan, draw and label design of toy. • Practise skills needed to make toy; joining, cutting strips of paper, concertina folding. • Make mock ups of toys. • Create toys using plan, resources and tools identified. • Evaluate product against design criteria. What makes your toy successful? • Use iPads to record the movements of the toys. 	<p>Confucius Institute Newcastle University</p>	<p>Explore, evaluate, products, design, plan, criteria, tools, equipment, cutting, shaping, joining, finishing, fold, concertina, appealing, techniques, modify, develop, design criteria, evaluate</p>		
	<p>Year 2 Spring 1</p> <p>Pull Along Dragon Toy</p>	<ul style="list-style-type: none"> • Explore and analyse a range of pull along toys. • Identify their purpose, suitability and appearance. How do they work? • Explore images and videos of pull along toys. Identify their purpose, suitability and appearance. How are they the same and different from other vehicles? • Create a mock-up of a toy. • Identify and select from a range of materials to create pull along toy, focus on strength and flexibility. • Plan and design a moving dragon toy. • Create dragon toys using designs and resources identified. • Evaluate products – Identify improvements, issues that arose and how they were overcome. 	<p>Confucius Institute Newcastle University</p>	<p>Explore, evaluate, products, design, plan, criteria, tools, equipment, cutting, shaping, joining, finishing, fold, mechanisms, techniques, modify, develop, success criteria, axle, wheel, dowelling</p>		

Design, Make and Evaluate a product - Science Project	<p>Year 1 Summer 1 – Percy the Park Keeper has a problem. Opening a Tea Room</p>	<ul style="list-style-type: none"> • Explore and evaluate afternoon teas. What do people eat and drink for afternoon tea? How is it presented? Plan an afternoon tea in the classroom. • Research a range of ready-made sandwiches and cakes. • Design an afternoon tea, discuss where the food comes from. Is the tea a balance of foods? • Ensure hands and surfaces are clean. • Use kitchen tools effectively to chop and cut food. • Make and bake cakes using kitchen utensils. • Decorate the cakes, make choices about the colour of icing and toppings. • Evaluate the event, ask the guests to say what they liked, did not like about the afternoon tea. Can they suggest any improvements? 	Marine Park	Explore, evaluate, products, design, plan, criteria, tools, equipment, cutting, appealing, techniques, develop, success criteria,		
	<p>Year 2 Summer 1 The Buzz about Bees: Bee Sanctuary Design a Bee Hotel</p>	<ul style="list-style-type: none"> • Explore and analyse bee hotels • Identify purpose of a bee hotel. Identify materials used to create bee hotels. • Draw a bee hotel, label materials and explain their purpose. • Explore and analyse a range of materials to create own bee hotel for a Bee Sanctuary. • Decide on design criteria focus. • Identify equipment and resources to create a bee hotel. • Select tools to join materials together to build a bee hotel. • Draw and label a picture of the finished bee hotel. • Evaluate against the agreed design criteria. • Make observations of the frequency bees use the hotel. 	Alnwick Garden	Evaluate, product, design, appealing, review, purpose, design criteria, bee hotel, bamboo, support, frame		
Design, Make and Evaluate a Product	<p>Year 1 Summer 2 Good Luck Gifts</p>	<ul style="list-style-type: none"> • Identify the purpose for making a gift. • Explore and analyse plaques and medals. • Evaluate existing plaques/medals. • Identify the materials needed to create a gift. • Create a plan of their gift; label a drawing and identify materials and tools. • Practice using a hacksaw and sanding equipment. • Cut and sand a piece of balsa wood to create gift. • Complete gift by decorating and adding a hanging loop. • Evaluate product and identify improvements. 		Evaluate, product, design, appealing, review, purpose, analyse, plaque, hacksaw, sanding block, balsa wood, sawing, sanding, decoration, safety		

	<p>Year 2 Summer 2</p> <p>Leavers' T-Shirts</p>	<ul style="list-style-type: none"> • Explore and analyse leavers' hoodies and t-shirts. Identify their purpose. What are the similarities and differences? • Discuss and identify a set of design criteria for making a t-shirt for leaving our school and for the leavers' concert; name, school, year, colour, embellishments securely attached. • Explore from a range of materials to decide on embellishments. • Draw the design the front and back of the t-shirt • Use information technology to support the design process. • Identify and record the equipment needed to create the t-shirt. • Explain why particular resources have been selected. • Create t-shirts using plans and making modifications where necessary. • Test and evaluate t-shirt; Can I move around in it? Is it suitable for the concert? Does it show that I have been a part of Biddick Hall Infant and Nursery School? 		<p>Appealing, product, plan, design, evaluate. design criteria, leavers' t-shirts, attach, join, embellishments, suitability, fabric, fabric paint,</p>		
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