Cumwhinton School - CUMWHINTON CURRICULUM

Design Technology - Termly Progression

Below the DT Curriculum has been broken into 4 essential strands which are covered across the school, across the years.

Design	1	Nake Evaluate	Technology Vocabulary		
Year group	AUTUMN Humanity Local	SPRING Innovation National	SUMMER The World Worldwide		
EYFS Reception ELG Development matters	Fine Motor Skills Develop their small motor skills so they can use a range of tools competently, safely and confidently. Use a range of small tools, including scissors, paintbrushes and cutlery. Begin to show accuracy and care when drawing. Creating with Materials. Return to and build on their previous learning, refining ideas and developing their ability to represent them. Create collaboratively sharing ideas, resources and skills. 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. Make use of props and materials when role playing characters in narratives and stories				
Year 1		<u>Cooking and Nutrition</u> To be able to use the basic principles of a healthy diet to prepare dishes To understand where food comes from.	To design purposeful, functional, appealing products for themselves and other		
Year 2		<u>Cooking and Nutrition</u> To be able to use the basic principles of a healthy diet to prepare dishes To understand where food comes from.	and varied To design purposeful, functional, appealing products for themselves and other users based on design criteria. To generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology To select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] To select from and		

		use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics To explore and evaluate a range of existing products. To evaluate their ideas and products against design criteria To build structures, exploring how they can be made stronger, stiffer and more stable. To explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products
Year 3	To 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. To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 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 To investigate and analyse a range of existing products. To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. To understand how key events and individuals in design and technology have helped shape the world To apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] To understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] To apply their understanding of computing to program, monitor and control their products. Vocab- user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch,	Cooking and Nutrition To understand and apply the principles of a healthy and varied diet To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Year 4	appealing, pulley, gear, lever, weight, explain. To 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. To generate, develop, model and communicate their ideas through discussion,	<u>Cooking and Nutrition</u> To understand and apply the principles of a healthy and varied diet To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques

	annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 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 To investigate and analyse a range of existing products To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. To understand how key events and individuals in design and technology have helped shape the world To apply their understanding of how to strengthen, stiffen and reinforce more complex structures. To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] To understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] To apply their understanding of computing to program, monitor and control their products.	To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Year 5	<u>Cooking and Nutrition</u> To understand and apply the principles of a healthy and varied diet To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	To 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. To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 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 To investigate and analyse a range of existing products. To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. To understand how key events and individuals in design and technology have helped shape the world To apply their understanding of how to strengthen, stiffen and reinforce more complex structures. To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] To understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] To apply their understanding of computing to program, monitor and control their products

Year 6	Cooking and Nutrition To understand and apply the principles of a healthy and varied diet To prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques To understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.	To 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. To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design To select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately 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 To investigate and analyse a range of existing products. To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. To understand how key events and individuals in design and technology have helped shape the world To apply their understanding of how to strengthen, stiffen and reinforce more complex structures. To understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] To understand
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