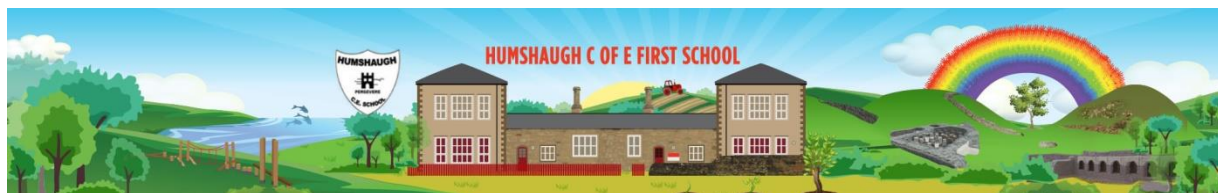


Design Technology Curriculum Progression in Skills



What will a Humshaugh First School Designer look like?		
	At the end of Year 2 they will have the following knowledge:	At the end of Year 6 they will have the following knowledge:
Being a Designer	<p>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:</p> <p>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</p> <p>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</p>	<p>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, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to:</p> <p>Design -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 -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>Make -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</p>

Design Technology Curriculum Progression in Skills

	<p>Evaluate -explore and evaluate a range of existing products -evaluate their ideas and products against design criteria</p> <p>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</p>	<p>to their functional properties and aesthetic qualities</p> <p>Evaluate -investigate and analyse a range of existing products -evaluate their ideas and products against their own design criteria and consider the views of others to improve their work -understand how key events and individuals in design and technology have helped shape the world</p> <p>Technical knowledge -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] - understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] -apply their understanding of computing to program, monitor and control their products</p>
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Progression of key skills from Y1 – 4

Progression of key skills from Y1 – Y4	Developing, planning and communicating ideas.	Working with tools, equipment, materials and components to make quality products (inc food)	Evaluating processes and products
End of EYFS linked to ELGs	<ul style="list-style-type: none"> -Select and use technology for particular purposes -Constructs with a purpose in mind -Use what is known about media and materials, thinking about uses and purposes. 	<ul style="list-style-type: none"> -Use a variety of resources -Use simple tools and techniques competently and appropriately -Select tools and techniques needed to shape, assemble and join materials -Safely use and explore a variety of 	<ul style="list-style-type: none"> -Select appropriate resources and adapt work where necessary -Use what is known about media and materials and its uses and purposes to improve work -Express ideas effectively, develop

Design Technology Curriculum Progression in Skills

	<ul style="list-style-type: none"> -Represent ideas, thoughts and feelings through Design Technology (art, design, music, role play and stories) -Understand the importance and need for safety and hygiene when planning to make 	<p>tools, materials and techniques</p> <ul style="list-style-type: none"> -Experiment with colour, texture, design, form and function. -Use simple tools to effect change to materials -Handle tools, objects, materials and construction safely and with increasing control -Practise some appropriate safety measures without direct supervision -Know about the need for safety, consider and manage some risks when preparing food -Know about the importance of hygiene when dealing with food. 	<p>own explanations by connecting own ideas or events</p> <ul style="list-style-type: none"> -Link statements together and stick to a main theme or intention when talking about design product
End of Year 1	<ul style="list-style-type: none"> - Draw on their own experience to help generate ideas - Suggest ideas and explain what they are going to do - Identify who their design is for - Model their ideas -Talk about how they would improve their idea 	<ul style="list-style-type: none"> - Make their design using appropriate techniques -With help measure, mark out, cut and shape a range of materials - Use tools e.g. scissors and a hole punch safely - Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape - Select and use appropriate ingredients, processes and tools - Use basic food handling, hygienic practices and personal hygiene - Use simple finishing techniques to 	<ul style="list-style-type: none"> - Verbally evaluate their products identifying strengths and possible changes they might make -Talk about their ideas, saying what they like and dislike about them

Design Technology Curriculum Progression in Skills

		improve the appearance of their product	
End of Year 2	<ul style="list-style-type: none"> -Generate ideas by drawing on their own and other people's experiences as well as knowledge of existing products -Communicate and develop their design ideas through discussion, observation, drawing and modelling -Identify a purpose and create a simple design criteria -Make simple drawings and label parts 	<ul style="list-style-type: none"> -Begin to select tools and materials; use vocabulary to name and describe them, and explain choices for use -Measure, cut and score with some accuracy -Use hand tools safely and appropriately -Assemble, join and combine materials and components in order to make a product -Cut, shape and join fabric to make a simple garment. -Use basic sewing techniques -Follow safe procedures for food safety and hygiene -Choose and use appropriate finishing techniques 	<ul style="list-style-type: none"> -Evaluate against their design criteria -Evaluate their products as they are developed, identifying strengths and possible changes they might make - Evaluate their product by answering simple questions about the design/make process
End of Year 3	<ul style="list-style-type: none"> -Research and generate ideas for an item, considering its purpose and audience -Identify a purpose and establish criteria for a successful product -Plan the order of their work before starting -Explore, develop and communicate design proposals by modelling ideas (including use of ICT) -Make drawings with labels and annotations when designing 	<ul style="list-style-type: none"> -Use tools and techniques for making their product to fit the needs of the task and purpose safely -Measure, mark out, cut, score and assemble components with more accuracy -Work safely and accurately with a range of simple tools -Think about their ideas as they make progress and be willing to change things if this helps them improve their work 	<ul style="list-style-type: none"> -Evaluate their product against original design criteria e.g. how well it meets its intended purpose/audience -Evaluate their product by asking and answering questions about the design/make process -Identify strengths and improvements in relation to views of the target audience/purpose

Design Technology Curriculum Progression in Skills

		<ul style="list-style-type: none"> -Measure, tape or pin, cut and join fabric with some accuracy -Demonstrate hygienic food preparation and storage -Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment including ICT 	
End of Year 4	<ul style="list-style-type: none"> -Research and generate realistic ideas, considering the purpose, ensuring specific design features appeal to the target audience -Make annotated, labelled diagram from different views showing specific features -Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail -Disassemble existing products, evaluate and identify criteria that can be used to inform and improve their own designs 	<ul style="list-style-type: none"> -Use appropriate tools and techniques for making their product in relation to functional properties and requirements safely -Measure, mark out, cut and shape range of materials, using appropriate tools, equipment and techniques -Join and combine materials and components accurately in temporary and permanent ways -Sew using a range of different stitches, weave and knit -Measure, tape or pin, cut and join fabric with some accuracy -Use simple graphical communication techniques 	<ul style="list-style-type: none"> - Evaluate their work both during and at the end of the assignment -Evaluate their products and carrying out appropriate tests

Design Technology Curriculum Progression in Skills

Concepts in Design Technology

At the end of Early Years Foundation Stage, the pupils will have developed an understanding of the following concepts in Design Technology:	At the end of Key Stage 1, the pupils will have developed an understanding of the following concepts in Design Technology:	At the end of Key Stage 2, the pupils will have developed an understanding of the following concepts in Design Technology:
Tools, ideas, safety, design, make, plan, colour, describe, make better, explore, mix, texture, playdough, junk model, construction, build, scissors, glue, cellotape, shape, join, draw, label, healthy, clean, control	Model, generate, explain, target audience, purpose, research, measure, plan, equipment, product, hygiene, technique, evaluate, question, strength, sequence, improve, changes, likes, dislikes, fabric, features, design criteria, finishing techniques, materials, tools	Healthy living, health and safety, designing to a brief, communicating ideas, labelling