

Pollington –Balne CofE Primary - Design and Technology Whole School Map

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	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	'Designing and Making' is identified as a strand within Knowledge and Understanding of the World.	Christmas Enterprise					
Programmes of study							
Design	Construct with a purpose in mind, using a variety of resources.	To state what products, they are making.	To use knowledge of other products to come up with ideas.	Describe the purpose of their product.	Model their ideas using prototypes.	Indicate design features of their products that will appeal to intended users.	Model their ideas using prototypes.
	Use simple tools and techniques competently and appropriately.	To state who their product is for.	To develop and communicate ideas by talking and drawing.	Indicate design features of their products that will appeal to intended users.	Use annotated sketches to develop and communicate their ideas.	Carry out research, using surveys interviews, questionnaires and web-based resources.	Generate realistic ideas, focussing on the needs of the user.
	Build and construct with a wide range of objects, selecting appropriate resources and adapting their work when necessary.	To say how their products will work.		Develop their own design criteria and use these to inform their ideas.	Develop their own design criteria and use these to inform their ideas.	Use the research to identify the needs, wants of the intended audience.	Carry out research, using surveys interviews, questionnaires and web-based resources.
	Select the tools and techniques they need to shape, assemble and join materials they are using.	To say how they will make their products.		Use annotated sketches to develop and communicate their ideas.		Use annotated sketches to develop and communicate their ideas.	Develop own simple design brief.
						Model their ideas using prototypes.	

Make		Plan by suggesting what to do next. Follow H&S procedures. Assemble, join and combine materials. Use finishing techniques, including those from art and design.	Select from a range of tools and equipment. Select from a range of materials based on their characteristics. Follow H&S procedures. Assemble, join and combine materials with increasing accuracy. Use finishing techniques, including those from art and design.	Select tools appropriate to the task in relation to skills and technique they will be using. Follow H&S procedures. Use a wider range of materials and components than KS1 Assemble, join and combine materials with some accuracy. Use finishing techniques, including those from art and design with some accuracy.	Follow H&S procedures. Use a wider range of materials and components that KS1 Assemble, join and combine materials with more accuracy. Use finishing techniques, including those from art and design with some accuracy.	Explain their choice of material and components according to functional and aesthetic qualities. Follow H&S procedures. Use techniques that involve a number of steps. Accurately assemble, join and combine materials. Accurately apply a range of finishing techniques, including those from art and design.	Select tools and equipment suitable for the task Explain their choice of materials and components according to functional properties and aesthetic qualities. Follow H&S procedures. Produce appropriate lists of tools, equipment and materials that they need. Formulate step-by-step plans as a guide to making. Use techniques that involve a number of steps. Accurately apply a range of finishing techniques, including those from art and design.

Evaluate		To talk about their design and what they are making. Make simple judgements about their products and ideas. Suggest how their products can be improved.	To talk about their design and what they are making. Make higher judgements about their products and ideas. Suggest how their products can be improved.	Identify strengths and areas for development in their product. Consider the view of others to improve their work.	Identify strengths and areas for development in their product. Consider the view of others to improve their work. Use the design criteria to evaluate the completed products.	Identify strengths and areas for development in their product. Consider the view of others to improve their work. Use the design criteria to evaluate the completed products. Critically evaluate the quality of their design, manufacture and fitness for purpose of their products as they are designing and making.	Identify strengths and areas for development in their product. Consider the view of others to improve their work. Use the design criteria to evaluate the completed products. Critically evaluate the quality of their design, manufacture and fitness for purpose of their products as they are designing and making. Evaluate their design against their original design specification.
Cooking and nutrition			Use the basic principles of a healthy and varied diet to prepare dishes. To understand where food comes from.		Understand and apply the principles of a healthy and varied diet	Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.	Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Technical Knowledge		To know that freestanding structures can be made stronger, stiffer and more stable. To know about the simple characteristics of materials and components.	To know that freestanding structures can be made stronger, stiffer and more stable. To know about the simple characteristics of materials and components. That a 3-D textiles product can be assembled from two identical fabric shape	That materials can have both functional and aesthetic qualities. That more than one material can be combined and mixed to create more useful characteristics. How to use learning from science and maths to help design and make products that work That a single fabric shape can be used to make a 3D textiles product	That materials can have both functional and aesthetic qualities. That more than one material can be combined and mixed to create more useful characteristics	That materials can have both functional and aesthetic qualities. That more than one material can be combined and mixed to create more useful characteristics. How to use learning from science and maths to help design and make products that work That a 3D textiles product can be made from a combination of fabric shapes. That a recipe can be adapted by adding or substituting one or more ingredients Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]	That materials can have both functional and aesthetic qualities. That more than one material can be combined and mixed to create more useful characteristics. How to use learning from science and maths to help design and make products that work That a 3D textiles product can be made from a combination of fabric shapes. That a recipe can be adapted by adding or substituting one or more ingredients Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
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Vocabulary

	planning, investigating, design, evaluate, make, user, purpose, ideas, product,	investigating, planning, design, make, evaluate, user, purpose, ideas, design criteria, product, function	user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, function, planning, design criteria, annotated sketch, appealing	evaluating, design brief design criteria, innovative, prototype, user, purpose, function, prototype, design criteria, innovative, appealing, design brief, planning, annotated sketch, sensory evaluations	design decisions, functionality, authentic, user, purpose, design specification, design brief, innovative, research, evaluate, design criteria, annotate, evaluate, mock-up, prototype	function, innovative, design specification, design brief, user, purpose design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional, mock-up, prototype
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