

DESIGN AND TECHNOLOGY SUBJECT LEARNING EXPECTATIONS



Programme of Study

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| <p>Key stage 1</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 and school, gardens and playgrounds, the local community, industry and the wider environment].</p> <p>When designing and making, pupils should be taught to:</p> | <p>The Seasons</p> <p>Cooking using seasonal produce</p> | <p>Africa</p> <p>Mask Making</p> | <p>Materials</p> <p>The seaside</p> <p>Moving Postcards</p> |
| <p>Design</p> <ul style="list-style-type: none"> 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>Make</p> <ul style="list-style-type: none"> 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>Evaluate</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> 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>Cooking and Nutrition</p> <ul style="list-style-type: none"> As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. <p>Pupils should be taught to:</p> <p>Key stage 1</p> <ul style="list-style-type: none"> Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from. | <p>Design, make evaluate, improve:</p> <p>I must design products that have a clear purpose and an intended user</p> <p>I should make products refining the design as work progresses</p> <p>I could explain why I have chosen specific materials for a purpose</p> <p>Inspiration:</p> <p>I must explore objects and designs to identify likes and dislikes of the designs</p> <p>I should suggest improvements to existing designs</p> <p>I could explore how products have been created</p> <p>Food:</p> <p>I must cut, peel or grate ingredients safely and hygienically</p> <p>I must assemble or cook ingredients</p> <p>I must use the basic principles of a healthy and varied diet to prepare dishes</p> <p>I should measure or weigh using measuring cups or electronic scales</p> <p>I could understand where food comes from</p> | <p>Design, make evaluate, improve:</p> <p>I must design products that have a clear purpose and an intended user</p> <p>I should make products refining the design as work progresses</p> <p>I could explain why I have chosen specific materials for a purpose</p> <p>Inspiration:</p> <p>I must explore objects and designs to identify likes and dislikes of the designs</p> <p>I should suggest improvements to existing designs</p> <p>I could explore how products have been created</p> <p>Materials:</p> <p>I must cut materials safely using tools provided</p> <p>I must measure and mark out to the nearest centimetre</p> <p>I should demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling)</p> <p>I should demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen)</p> | <p>Design, make evaluate, improve:</p> <p>I must design products that have a clear purpose and an intended user</p> <p>I should make products refining the design as work progresses</p> <p>I could explain why I have chosen specific materials for a purpose</p> <p>Inspiration:</p> <p>I must explore objects and designs to identify likes and dislikes of the designs</p> <p>I should suggest improvements to existing designs</p> <p>I could explore how products have been created</p> <p>Construction and mechanics:</p> <p>I must use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products</p> <p>I must create products using levers, wheels and winding mechanisms</p> |

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| <p>Design</p> <ul style="list-style-type: none"> • 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>Make</p> <ul style="list-style-type: none"> • 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>Evaluate</p> <ul style="list-style-type: none"> • Explore and evaluate a range of existing products • Evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> • 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>Cooking and Nutrition</p> <ul style="list-style-type: none"> • As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. <p>Pupils should be taught to:</p> <p>Key stage 1</p> <ul style="list-style-type: none"> • Use the basic principles of a healthy and varied diet to prepare dishes • Understand where food comes from. | <p>Design, make evaluate, improve:</p> <p>I must design products that have a clear purpose and an intended user</p> <p>I must make products refining the design as work progresses</p> <p>I should explain why I have chosen specific materials for a purpose</p> <p>Inspiration:</p> <p>I must explore objects and designs to identify likes and dislikes of the designs</p> <p>I should suggest improvements to existing designs</p> <p>I should explore how products have been created</p> <p>Textiles:</p> <p>I must shape textiles using templates</p> <p>I must colour and decorate textiles using a number of techniques (such as dyeing, adding sequins or printing)</p> <p>I should join textiles using running stitch</p> | <p>Design, make evaluate, improve:</p> <p>I must design products that have a clear purpose and an intended user</p> <p>I must make products refining the design as work progresses</p> <p>I should explain why I have chosen specific materials for a purpose</p> <p>Inspiration:</p> <p>I must explore objects and designs to identify likes and dislikes of the designs</p> <p>I should suggest improvements to existing designs</p> <p>I should explore how products have been created</p> <p>Materials:</p> <p>I must cut materials safely using tools provided</p> <p>I must measure and mark out to the nearest centimetre</p> <p>I should demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling)</p> <p>I should demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen)</p> | <p>Design, make evaluate, improve:</p> <p>I must design products that have a clear purpose and an intended user</p> <p>I must make products refining the design as work progresses</p> <p>I should explain why I have chosen specific materials for a purpose</p> <p>Inspiration:</p> <p>I must explore objects and designs to identify likes and dislikes of the designs</p> <p>I should suggest improvements to existing designs</p> <p>Electricals:</p> <p>I must create a simple circuit</p> <p>Materials:</p> <p>I must cut materials safely using tools provided</p> <p>I must measure and mark out to the nearest centimetre</p> <p>I should demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling)</p> <p>I should demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen)</p> |

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| <p>Key stage 2</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 and school, gardens and playgrounds, the local community, industry and the wider environment].</p> <p>When designing and making, pupils should be taught to:</p> | <p>The environment Reduce, Reuse and Recycle</p> <p>Junk orchestra, design and make own instruments</p> | <p>The Egyptians Egyptian Death Masks</p> | <p>The Caribbean Caribbean Cooking</p> |
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| <p>Design</p> <ul style="list-style-type: none"> 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>Make</p> <ul style="list-style-type: none"> 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>Evaluate</p> <ul style="list-style-type: none"> Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria <p>Technical knowledge</p> <ul style="list-style-type: none"> 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>Cooking and Nutrition</p> <ul style="list-style-type: none"> As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. <p>Pupils should be taught to:</p> <p>Key stage 1</p> <ul style="list-style-type: none"> Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from. | <p>Design, make evaluate, improve: I must design with purpose by identifying opportunities to design</p> <p>I must refine work and techniques as work progresses, continually evaluating the product design</p> <p>I should carefully selecting materials for a purpose</p> <p>Inspiration: I must identify designers to generate ideas for designs</p> <p>I should improve on existing designs, giving reasons for choices</p> <p>I could disassemble products to understand how they work</p> <p>Materials: I must cut materials accurately and safely by selecting appropriate tools</p> <p>I must apply appropriate cutting and shaping techniques</p> <p>I must select appropriate joining techniques</p> <p>I could measure and mark out to the nearest millimetre</p> | <p>Design, make evaluate, improve: I must design with purpose by identifying opportunities to design</p> <p>I must refine work and techniques as work progresses, continually evaluating the product design</p> <p>I should carefully selecting materials for a purpose</p> <p>Inspiration: I must identify designers to generate ideas for designs</p> <p>I should improve on existing designs, giving reasons for choices</p> <p>I could disassemble products to understand how they work</p> <p>Materials: I must cut materials accurately and safely by selecting appropriate tools</p> <p>I must apply appropriate cutting and shaping techniques</p> <p>I must select appropriate joining techniques</p> <p>I could measure and mark out to the nearest millimetre</p> | <p>Design, make evaluate, improve: I must design with purpose by identifying opportunities to design</p> <p>I must refine work and techniques as work progresses, continually evaluating the product design</p> <p>I should carefully selecting materials for a purpose</p> <p>Inspiration: I must identify designers to generate ideas for designs</p> <p>I should improve on existing designs, giving reasons for choices</p> <p>I could disassemble products to understand how they work</p> <p>Food: I must follow a recipe</p> <p>I must prepare ingredients hygienically using appropriate utensils</p> <p>I must measure ingredients to the nearest gram accurately</p> <p>I must assemble or cook ingredients</p> |
| <p>Model (e.g. car) Making from recycled materials</p> | | | |
| <p>Egyptian Death Masks</p> | | | |
| <p>Caribbean Cooking</p> | | | |

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