

Curriculum and skills coverage for Design and Technology

| | Foundation Stage 1 | Foundation stage 2 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
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| Developing, planning and communicating ideas. | N1- To understand that equipment and tools have to be used safely. | <p>R1- To show understanding of the need for safety when tackling new challenges and consider and manage some risks.</p> <p>R2- To show understanding of how to transport and store equipment safely.</p> | <p>1.1- Design purposeful, functional, appealing products for themselves and others based on a design criteria.</p> <p>1.2- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups.</p> | <p>2.1- Design purposeful, functional, appealing products for themselves and others based on a design criteria.</p> <p>2.2- Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT.</p> | <p>3.1- Use research and develop design criteria to inform the design of innovative, functional appealing products that are fit for purpose and aimed at particular individuals or groups.</p> <p>3.2- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.</p> | <p>4.1- Use research and develop design criteria to inform the design of innovative, functional appealing products that are fit for purpose and aimed at particular individuals or groups</p> <p>4.2- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces.</p> | <p>5.1- Use research and develop design criteria to inform the design of innovative, functional appealing products that are fit for purpose and aimed at particular individuals or groups</p> <p>5.2- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and</p> | <p>6.1- Use research and develop design criteria to inform the design of innovative, functional appealing products that are fit for purpose and aimed at particular individuals or groups</p> <p>6.2- Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and</p> |

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| | | | | | | | computer-aided design | computer-aided design |
| Working with tools, equipment, materials and components to make quality products | <p>N2- To use one-handed tools and equipment e.g. making snips in paper with scissors.</p> <p>N3- To show skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movement or new images.</p> <p>N4- To capture experiences and responses with a range of media.</p> <p>N5- To use various</p> | <p>R3- To use simple tools to effect changes to materials.</p> <p>R4- To handle tools, objects, construction and malleable materials safely and with increasing control.</p> <p>R5- To practise some appropriate safety measures without direct supervision.</p> <p>R6- To experiment to create</p> | <p>1.3- Select from and use a range of tools and equipment to perform tasks (for example cutting, shaping, joining and finishing).</p> <p>1.4- Select from and use a wide range of materials and components including construction materials, textiles and ingredients according to their characteristic.</p> <p>1.5- Build structures exploring how they</p> | <p>2.3- Select and use a range of tools and equipment to perform tasks (for example cutting, shaping, joining and finishing).</p> <p>2.4- Select from and use a wide range of materials and components including construction materials, textiles and ingredients according to their characteristic.</p> <p>2.5- Build structures exploring how they</p> | <p>3.3- Select and use a range of tools and equipment to perform tasks (for example cutting, shaping, joining and finishing) accurately.</p> <p>3.4- 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.</p> | <p>4.3- Select and use a range of tools and equipment to perform tasks (for example cutting, shaping, joining and finishing) accurately.</p> <p>4.4- 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.</p> | <p>5.3- Select and use a range of tools and equipment to perform tasks (for example cutting, shaping, joining and finishing) accurately.</p> <p>5.4- 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.</p> | <p>6.3- Select and use a range of tools and equipment to perform tasks (for example cutting, shaping, joining and finishing) accurately.</p> <p>6.4- 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.</p> |

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| | <p>construction materials.</p> <p>N6- To show an interest in technological toys with knobs, pulleys or real objects</p> <p>N7- Begin to construct, stacking blocks vertically and horizontally, making enclosures and creating spaces.</p> <p>N8- Joins construction pieces together to build and balance</p> | <p>different textures.</p> <p>R7- To understand different media can be combined to create new effects.</p> <p>R8- To manipulate materials to achieve a planned effect.</p> <p>R9- To construct with a purpose in mind, using a variety of resources.</p> <p>R10- To use simple tools and techniques competently and appropriately.</p> | <p>can be made stronger, stiffer and more stable.</p> <p>1.6- Explore and use mechanisms for example levers, sliders, wheels and axles in their products.</p> | <p>can be made stronger, stiffer and more stable.</p> | <p>3.5- Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).</p> | <p>4.5- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>4.6- Understand and use electrical systems in their products for example series circuits incorporating switches, bulbs, buzzers and motors.</p> | <p>5.5- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> | <p>6.5- Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>6.6- Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages</p> <p>6.7- Understand and use electrical systems in their products for example series circuits incorporating</p> |
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| | | <p>R11- To select appropriate resources and adapt work where necessary.</p> <p>R12- To select tools and techniques needed to shape, assemble and join materials they are using.</p> <p>R13- To create simple representation of events, people and objects.</p> <p>R14- To choose particular colours for a purpose.</p> <p>R15- To handle</p> | | | | | <p>switches, bulbs, buzzers and motors</p> <p>6.8- Apply their understanding of computing to program, monitor and control their products.</p> |
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| | | <p>equipment and tools effectively.</p> <p>R16- To safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.</p> | | | | | | |
| <p>Evaluating processes and products</p> | <p>N9- To show an interest in technological toys with knobs, pulleys or real objects.</p> <p>N10- To develop preferences for forms of expression.</p> <p>N11- Realises tools can be</p> | <p>R17- To use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>R18- To represent their own ideas, thoughts and feelings</p> | <p>1.7- To explore a range of existing products.</p> <p>1.8- To evaluate their products against a design criteria.</p> | <p>2.6- To explore a range of existing products.</p> <p>2.7- To evaluate their products against a design criteria.</p> | <p>3.6- Investigate and analyse a range of existing products.</p> <p>3.7- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> | <p>4.7- Investigate and analyse a range of existing products.</p> <p>4.8- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> | <p>5.6- Investigate and analyse a range of existing products.</p> <p>5.7- Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> | <p>6.9- Investigate and analyse a range of existing products.</p> <p>6.10- Evaluate their ideas and products against their own design criteria and consider the views of others to</p> |

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| | used for a purpose. | through design and technology. | | | | | 5.8- Understand how key events and individuals in design and technology have shaped the world. | improve their work. 6.11- Understand how key events and individuals in design and technology have shaped the world. |
| Food and Nutrition | <p>N12- To use one-handed tools and equipment.</p> <p>N13- To understand that equipment and tools have to be used safely.</p> | <p>R19- To use simple tools to effect changes.</p> <p>R20- To handle tools safely and with increasing control.</p> <p>R21- To show understanding of the need for safety when tackling new challenges and consider and manage some risks.</p> | <p>1.9- Use the basic principles of a healthy and varied diet to prepare dishes.</p> <p>1.10- To understand where food comes from.</p> | <p>2.8- Use the basic principles of a healthy and varied diet to prepare dishes.</p> <p>2.9- To understand where food comes from</p> | <p>3.8- Understand and apply the principles of a healthy and varied diet.</p> <p>3.9- Prepare and cook a variety of predominantl y savoury dishes using a range of cooking techniques.</p> | <p>4.9- Understand and apply the principles of a healthy and varied diet.</p> <p>4.10- Prepare and cook a variety of predominantl y savoury dishes using a range of cooking techniques.</p> <p>4.11- Understand seasonality and know where and</p> | <p>5.9- Understand and apply the principles of a healthy and varied diet.</p> <p>5.10- Prepare and cook a variety of predominantl y savoury dishes using a range of cooking techniques.</p> | <p>6.12- Understand and apply the principles of a healthy and varied diet.</p> <p>6.13- Prepare and cook a variety of predominantl y savoury dishes using a range of cooking techniques.</p> <p>6.14- Understand seasonality and know where and</p> |

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| | | <p>R22- To show understanding of how to transport and store equipment safely.</p> <p>R23- To practice some appropriate safety measures without direct supervision.</p> <p>R24- To use simple tools and techniques competently and appropriately.</p> | | | | <p>how a variety of ingredients are grown, reared, caught and processed.</p> | | <p>how a variety of ingredients are grown, reared, caught and processed</p> |
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