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|  | Design | Make | Evaluate | Technical Knowledge |
| Year 1 | 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 | 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 | Explore and evaluate a range of existing products   evaluate their ideas and products against design criteria | 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 |
| Year 2 | 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 | 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 | Explore and evaluate a range of existing products   evaluate their ideas and products against design criteria | 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 |
| Year 3 | 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 | 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 | 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 | 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 |
| Year 4 | 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 | 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 | 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 | 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 |
| Year 5 | 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 | 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 | 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 | 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 |
| Year 6 | 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 | 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 | 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 | 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   apply their understanding of computing to program, monitor and control their products |
| **VOCABULARY** | **YEAR 1** | **YEAR 2** | **YEAR 3** | **YEAR 4** |
|  | **YEAR 5** | **YEAR 6** |  |  |
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