



Design and Technology



Design and Technology

Mile Post 1



Key Skills

| National Curriculum | | IPC learning Goals | IPC Themes |
|---|-----|---|------------|
| Design purposeful, functional, appealing products for themselves and other users based on design criteria | 1.2 | Be able to plan what they are going to make | |
| Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology | 1.3 | Be able to describe their plans in pictures and words | |
| Select from and use a range of tools and equipment to perform practical tasks | 1.4 | Be able to use simple tools and materials to make products | |
| | 1.5 | Be able to choose appropriate tools and materials for their tasks | |
| Select from and use a wide variety of materials and components, including construction materials, textiles and ingredients, according to their characteristics | 1.4 | Be able to use simple tools and materials to make products | |
| | 1.5 | Be able to choose appropriate tools and materials for their tasks | |
| Explore and evaluate a range of existing products | 1.7 | Be able to communicate on the usefulness of products in everyday use | |
| Evaluate their ideas and products against design criteria | 1.6 | Be able to comment on their own plans and products and suggest areas of improvement | |
| Build structures, exploring how they can be made stronger, stiffer and more stable | | | |
| Explore and use mechanisms, in their products | | | |
| Use the basic principles of a healthy and varied diet to prepare dishes | | | |
| Understand where food comes from | | | |

Areas of design

| | | | |
|---------------------|--|-----------------|--|
| Junk modeling | | Food technology | |
| Resistant materials | | Textiles | |
| Digital design | | Other | |

| Pupil Progress | EYFS | Y1 |
|---|------|----|
| Pupils working significantly above age related expectations | | |
| Pupils working significantly below age related expectations | | |



Design and Technology

Mile Post 2

Key Skills

| National Curriculum | | IPC learning Goals | IPC Themes |
|---|-----|--|------------|
| 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 | 2.1 | Know that the way in which products in everyday use are designed and made affects their usefulness | |
| | 2.2 | Be able to design and make products to meet specific needs | |
| | 2.7 | Be able to identify the ways in which products in everyday use meet specific needs | |
| Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design | 2.3 | Be able to make useable plans | |
| | 2.4 | Be able to make and use labeled sketches as designs | |
| Select from and use a wider range of tools and equipment to perform practical tasks | 2.5 | Be able to use simple tools and equipment with some accuracy | |
| Select from and use a wider variety of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities characteristics | | | |
| Investigate and analyse a range of existing products | 2.7 | Be able to identify the ways in which products in everyday use meet specific needs | |
| | 2.8 | Be able to suggest improvements to products in everyday use | |
| Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work | 2.6 | Be able to identify and implement improvements to their designs and products | |
| Understand how key events and individuals in design 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 (eg gears, pulleys, | | | |

| | | | |
|---|--|--|--|
| cams, levers and linkages). | | | |
| Understand and use electrical systems in their products | | | |
| Apply their understanding of computing to program, monitor and control their products | | | |
| 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 | | | |

| Areas of design | | | |
|---------------------|--|-----------------|--|
| Junk modeling | | Food technology | |
| Resistant materials | | Textiles | |
| Digital design | | Other | |

| Pupil Progress | Y2 | Y3 |
|---|----|----|
| Pupils working significantly above age related expectations | | |
| Pupils working significantly below age related expectations | | |

Design and Technology

Mile Post 3



Key Skills

| National Curriculum | | IPC learning Goals | IPC Themes |
|---|------|--|------------|
| 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 | 3.4 | Be able to respond to identified needs, wants and opportunities with informed designs and products | |
| | 3.5 | Be able to gather and use information to suggest solutions to problems | |
| | 3.7 | Be able to consider the needs of users when designing and making | |
| Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design | 3.6 | Be able to devise and use step-by-step plans | |
| Select from and use a wider range of tools and equipment to perform practical tasks accurately | 3.8 | Be able to select the most appropriate available tools and materials for a task | |
| | 3.9 | Be able to work with a variety of tools and materials with some accuracy | |
| | 3.13 | Understand the need for accurate design and working | |
| Select from and use a wider variety of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities characteristics | 3.8 | Be able to select the most appropriate available tools and materials for a task | |
| | 3.9 | Be able to work with a variety of tools and materials with some accuracy | |
| | 3.15 | Understand that different techniques, tools and materials are needed for different tasks | |
| Investigate and analyse a range of existing products | 3.11 | Be able to investigate the way in which simple products in everyday use are designed and made, and how they work | |
| | 3.12 | Be able to evaluate the effectiveness of simple products in everyday use | |
| Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work | 3.10 | Be able to test and evaluate their own work and improve on it | |
| | 3.16 | Understand that the quality of a product depends on how well it is made and how well it meets its intended purpose | |
| Understand how key events and individuals in design have helped shape the world | 3.2 | Know how the lives of people in the host country are affected by the extent of the technological advance | |
| | 3.3 | Know how the lives of people in their home country are affected by the extent of the technological advance | |
| Apply their understanding | | | |

| | | | |
|---|--|--|--|
| of how to strengthen, stiffen and reinforce more complex structures | | | |
| Understand and use mechanical systems in their products (eg gears, pulleys, cams, levers and linkages). | | | |
| Understand and use electrical systems in their products | | | |
| Apply their understanding of computing to program, monitor and control their products | | | |
| 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 | | | |

| Areas of design | | | |
|---------------------|--|-----------------|--|
| Junk modeling | | Food technology | |
| Resistant materials | | Textiles | |
| Digital design | | Other | |

| Pupil Progress | Y4 | Y5 | Y6 |
|---|----|----|----|
| Pupils working significantly above age related expectations | | | |
| Pupils working significantly below age related expectations | | | |