

Langton Primary School

Design & Technology Curriculum

Progression of Knowledge and Skills



Generation of Ideas

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>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>	<p>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>	<p>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.</p>	<p>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</p>	<p>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.</p>	<p>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.</p>

Use of IT

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>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>	<p>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>	<p>Apply their understanding of computing to program, monitor and control their products.</p>	<p>Apply their understanding of computing to program, monitor and control their products.</p>	<p>Apply their understanding of computing to program, monitor and control their products.</p>	<p>Apply their understanding of computing to program, monitor and control their products.</p>

Structures

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p>	<p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p>	<p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p>

Investigation

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).</p>	<p>Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing).</p>	<p>Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p>	<p>Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p>	<p>Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p>	<p>Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p>

Evaluation

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Evaluate their ideas and products against design criteria.</p>	<p>Evaluate their ideas and products against design criteria.</p>	<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>	<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>	<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>	<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>

Food Preparation & Cooking

EFYS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Use the basic principles of a healthy and varied diet to prepare dishes.</p>	<p>Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing). Use the basic principles of a healthy and varied diet to prepare dishes.</p>	<p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p>	<p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p>	<p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p>	<p>Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p>

Nutrition

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Use the basic principles of a healthy and varied diet to prepare dishes.</p>	<p>Use the basic principles of a healthy and varied diet to prepare dishes.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p>	<p>Understand and apply the principles of a healthy and varied diet.</p>

Origins of Food

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Understand where food comes from.</p>	<p>Understand where food comes from.</p>	<p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>	<p>Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>

Materials for Purpose

EFYS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p>	<p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p>	<p>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>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>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>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>

Electricity

EFYS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Explore and evaluate a range of existing products.</p>	<p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p>	<p>Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).</p>	<p>Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).</p>	<p>Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).</p>	<p>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.</p>

Mechanisms & Movement

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.</p>	<p>Explore and use mechanisms (for example, levers, sliders, wheels and axles), in their products.</p>	<p>Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).</p>	<p>Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).</p>	<p>Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).</p>	<p>Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).</p>

Compare & Contrast

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Explore and evaluate a range of existing products</p>	<p>Explore and evaluate a range of existing products</p>	<p>Understand how key events and individuals in design and technology have helped shape the world.</p>	<p>Explore and evaluate a range of existing products</p>	<p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p>	<p>Explore and evaluate a range of existing products</p>

Everyday Products

EFYS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	Explore and evaluate a range of existing products	Explore and evaluate a range of existing products	Explore and evaluate a range of existing products	Investigate and analyse a range of existing products.	Investigate and analyse a range of existing products.	Investigate and analyse a range of existing products.

Staying Safe

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	<p>Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.</p>	<p>Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.</p>	<p>Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.</p>	<p>Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.</p>	<p>Critique, evaluate and test their ideas and products and the work of others.</p>	<p>Critique, evaluate and test their ideas and products and the work of others.</p>

Significant People

EFYS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function</p> <p>Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.</p> <p>They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories</p>	Explore and evaluate a range of existing products	Explore and evaluate a range of existing products	Understand how key events and individuals in design and technology have helped shape the world.	Understand how key events and individuals in design and technology have helped shape the world.	Understand how key events and individuals in design and technology have helped shape the world.	Understand how key events and individuals in design and technology have helped shape the world.

To comply with the SEND Regulations and Disability Regulations 2014 and the Equality Act 2010 please see our school accessibility plan and the SEND information in the policies and SEND section of this website.