

Curriculum Map - DT



EYFS

Statutory requirements

Expressive Arts and Design: Creating with Materials

Children at the expected level of development will:

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form, and function;
- Share their creations, explaining the process they have used;

Make use of props and materials when role playing characters in narratives and stories.

Physical development: Repeated and varied opportunities to explore and play with puzzles, arts and crafts and the practice of using small tools, with feedback and support from adults, allow children to develop proficiency, control and confidence.

Expressive Arts and Design: It is important that children have regular opportunities to engage with the arts, enabling them to explore and play with a wide range of media and materials.

Understanding the World: Understanding the world involves guiding children to make sense of their physical world and their community. The frequency and range of children's personal experiences increases their knowledge and sense of the world around them

Non-Statutory Guidance

Development Matters 2021 and Birth to Five Matters 2021 offer guidance regarding learning pathways in the curriculum we offer through the EYFS.

Physical development:

Nursery: Choose the right resources to carry out their own plan. For example, choosing a spade to enlarge a small hole they dug with a trowel. Collaborate with others to manage large items, such as moving a long plank safely, carrying large hollow blocks. Explain why safety is an important factor in handling tools and moving equipment and materials. Have clear and sensible rules for everybody to follow. Use one-handed tools and equipment, for example, making snips in paper with scissors. Use a comfortable grip with good control when holding pens and pencils. Understanding the World: Show a preference for a dominant hand. Explore collections of materials with similar and/or different properties. Explore how things work. Talk about the differences between materials and changes they notice.

Reception: Physical Development: Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons.

Key Stage 1

Statutory requirements

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].

Cooking and nutrition: 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.

<i>Disciplinary Knowledge</i>	Technical Knowledge	Design	Make	Evaluate	Cooking & nutrition
Year 1	I can build structures. I can explore and use mechanisms (for example, levers, sliders, wheels and axles), in my products.	I can design purposeful, functional, appealing products for myself and other users based on design criteria.	I can select from and use a range of tools and equipment to perform practical tasks (EG cutting, shaping, joining and finishing).	I can explore and evaluate a range of existing products. I can evaluate my ideas and products against design criteria.	I can use the basic principles of a healthy and varied diet to prepare dishes. I can understand where food comes from.
Year 2	I can build structures, exploring how they can be made stronger, stiffer and more stable.	I can generate, develop, model and communicate my ideas through talking, drawing, templates, mock-ups and, where appropriate, ICT.	I can select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics	I can explore and evaluate a range of existing products. I can evaluate my ideas and products against design criteria.	I can use the basic principles of a healthy and varied diet to prepare dishes. I can understand where food comes from.

Key Stage 2

Statutory requirements

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, school, leisure, culture, enterprise, industry and the wider environment].

Cooking and nutrition: 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.

<i>Disciplinary Knowledge</i>	Technical Knowledge	Design	Make	Evaluate	Cooking & nutrition
Year 3	I can understand and use mechanical systems in my products (for example, gears, pulleys, cams, levers and linkages).	I can 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.	I can select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. I can select from and use a wider range of materials	I can investigate and analyse a range of existing products. I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work.	I can understand and apply the principles of a healthy and varied diet. I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.

			and components, including construction materials.		I can understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Year 4	I can understand and use electrical systems in my products (for example, series circuits incorporating switches, bulbs, buzzers and motors).	I can 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.	I can select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately. I can select from and use a wider range of materials and components, including construction materials.	I can investigate and analyse a range of existing products. I can evaluate my ideas and products against my own design criteria and consider the views of others to improve my work.	I can understand and apply the principles of a healthy and varied diet. I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. I can understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
Year 5	I can apply my understanding of how to strengthen, stiffen and reinforce more complex structures. I can understand and use mechanical systems in my products (for example, gears, pulleys, cams, levers and linkages).	I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.	I can 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	I can evaluate against design criteria and consider the views of others to improve my work. I can understand how key events and individuals in design and technology have helped shape the world.	I can understand and apply the principles of a healthy and varied diet. I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques. I can understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

<p style="text-align: center;">Year 6</p>	<p>I can apply my understanding of computing to program, monitor and control my products.</p>	<p>I can generate, develop, model and communicate my ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.</p>	<p>I can 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>I can evaluate against design criteria and consider the views of others to improve my work.</p> <p>I can understand how key events and individuals in design and technology have helped shape the world.</p>	<p>I can understand and apply the principles of a healthy and varied diet.</p> <p>I can prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques.</p> <p>I can understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.</p>
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