

Level Expected at the End of EYFS

We have aimed to select the Early Learning Goals that link most closely to the Design and Technology National Curriculum.

Expressive Arts and Design (Exploring and Using Media and Materials)

Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

Expressive Arts and Design (Being Imaginative)

Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.

Physical Development (Moving and Handling)

Children handle equipment and tools effectively, including pencils for writing.

What does DT look like in EYFS?

- Make a bird feeder
- Cooking
- Make a gingerbread man – discuss textures and changes that occur when heated.
- Shrove Tuesday – making topping choices based on likes and eating pancakes
- Stick puppets for fairy-tale characters
- Chinese New Year - Learn about and taste Chinese food
- Chinese lanterns

Expressive Arts and Design ELG: *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

Continuous provision for DT

- Indoor Creative Area
- Outdoor Creative Area
- Junk Modelling
- Funky Fingers
- Water play
- Outdoor Construction
- Indoor Construction
- Forest School
- Mud kitchen

Design

	KS1	LKS2	UKS2
	<p>Following on from EYFS, children will continue use their knowledge of existing products and their own experience to generate their ideas. They will design products that have a purpose and aimed at an intended user. Agreeing on their own design criteria, children will explain how their products will look and work through simple annotated drawings and computer software.</p>	<p>In LKS2, children will progress in their designing skills by being able to generate, develop, model and communicate their ideas through discussion, annotated sketches and more complex methods such as cross-sectional and exploded diagrams, prototypes, pattern pieces and computer- aided design. When designing, children will be expected to explore different initial ideas before deciding on their final design.</p>	<p>Continuing through the school, as children reach UKS2 they will be expected to use research to inform and develop detailed design criteria to inform the design of innovative, functional and appealing products that are fit for purpose and aimed at a target market. Children will continue to use annotated sketches, cross-sectional drawing, exploded diagrams and computer-aided software to design products whilst showing consideration of the availability and costings of resources when planning out designs.</p>

Make

	<p>In KS1, children will begin to select from a range of hand tools and equipment, such as scissors, graters, zesters, safe knives, juicers. They will learn to cut, shape and score materials with accuracy and assemble, join and combine a variety of materials and ingredients. When using fabric, they learn to manipulate the material in simple ways to create a desired effect, whilst learning to cut, shape and join the fabric to make a simple product.</p>	<p>In LKS2, Children select from and use a wider range of tools, materials and equipment (including mechanical and electrical components) compared to KS1 in order to perform practical tasks [for example, cutting, shaping, joining and finishing] accurately, considering the main stages of making in a systematic order. With growing independence, children will measure and mark out to the nearest cm and millimetre whilst continuing to cut, shape and score materials with some degree of accuracy. When using fabric, children will demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product and join textiles with an appropriate sewing technique.</p>	<p>With growing confidence in UKS2, children will select from a wide range of tools and equipment, explaining their choices whilst selecting from a range of materials and components according to their functional properties and aesthetic qualities. They are asked to independently take exact measurements and mark out, to within 1 millimetre. When using fabric, children will demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product whilst joining textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch. To complete their products, children will refine the finish, such as sanding or a more precise scissor cut after roughly cutting out a shape.</p>
--	---	--	---

Evaluate

	<p>In KS1, children will explore and evaluate a range of existing products using a given design criteria, showing their ideas through discussions and a simple written evaluation. Children will learn to identify strengths and possible changes they might make to refine their own designs, starting to understand that the iterative process sometimes involves repeating different stages of the process.</p>	<p>In LKS2, children will continue to evaluate their ideas and products against their own design criteria, learning to consider the views of others to improve their work. They will explore what materials/ingredients products are made from and suggest reasons for this. Children will evaluate the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.</p>	<p>In UKS2, children further develop their understanding of existing products by completing detailed competitor analysis of other products on the market. They critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make. Then they evaluate their ideas and products against the original design criteria, making changes as needed.</p>
--	--	---	--

Technical Knowledge

	<p>Following on from EYFS, children in KS1 build structures, exploring how they can be made stronger, stiffer and more stable. They talk about and start to understand the simple working characteristics of materials and components. They will also explore and create products using mechanisms, such as levers, sliders and wheels.</p>	<p>In LKS2, children apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products. Children are shown how mechanical and electrical systems have an input and output process whilst they make and represent simple electrical circuits, such as a series and parallel, and components to create functional products. Children will explain how mechanical systems such as levers and linkages create movement and use mechanical systems in their products.</p>	<p>Children apply their understanding of how to strengthen, stiffen and reinforce more complex structures to create more useful characteristics of products. They will explain how mechanical systems, such as cams, create movement and use mechanical systems in their products. They will learn to apply their understanding of computing to program, monitor and control a product.</p>
--	---	---	---

Cooking and Nutrition

	<p>Children use the basic principles of a healthy and varied diet to prepare dishes and broaden their understanding of where food comes from by explaining where in the world different foods originate from and that all food comes from plants or animals. Children learn to name and sort foods into the five groups in the Eatwell Guide and begin to understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why. They then use what they know about the Eatwell Guide to design and prepare dishes.</p>	<p>In LKS2, children start to know when, where and how food is grown (such as herbs, tomatoes and strawberries) in the UK, Europe and the wider world. They understand how to prepare and cook a variety of predominantly savoury dishes safely and hygienically. With support, they use a heat source to cook ingredients showing awareness of the need to control the temperature of the hob and/or oven and use a range of techniques such as mashing, whisking, crushing, grating, cutting, kneading and baking. Children continue their understanding of the Eatwell Guide by explaining that a healthy diet is made up of a variety and balance of different food and drink and apply these principles when planning and cooking dishes. Children will begin to follow a recipe independently and show an understanding of seasonality.</p>	<p>In UKS2, children further their knowledge of where food comes from by being able to explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world. They have the opportunity to independently follow a recipe where they measure accurately and calculate ratios of ingredients to scale up or down. During this, they learn to adapt and refine recipes by adding or substituting one or more ingredients to change the appearance, taste, texture and aroma. When cooking, children will demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source and learn how to use a range of cooking techniques, such as griddling, grilling, frying and boiling.</p>
--	---	---	--