



Design and Technology at Milford Infants' School

Intent

Through their Design and Technology learning, Milford children are **curious** when exploring and investigating how products are made and how they work. They are **enthusiastic** when designing and making their own products and **resilient** when evaluating their own work. They work both **independently** and **collaboratively** to develop their skills and understanding.

Teaching in the Early Years follows the Educational Programme and ideas from Development Matters relevant to our children's needs. Teachers follow and plan for children's interests throughout the year ensuring high quality opportunities are provided so that children can demonstrate the skills of the ELG by the end of the year.

Pre-School	Reception	Key Stage One
In the Early Years Design and Technology allows children to make sense and gain knowledge and understanding of the world in which they live. Design allows the children to think and use their imaginations - making and changing things for themselves. Technology allows them to put ideas together and make something for a purpose learning along the way the different possibilities or limits of their ideas.		Children will develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. Children will build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. Children will critique, evaluate and test their ideas and products and the work of others. Children will understand and apply the principles of nutrition and learn how to cook.
Personal, Social and Emotional Development Children will select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them. Physical Development Children will use large-muscle movements to wave flags and streamers, paint and make marks. Children will choose the right resources to carry out their own plan. Children will use one-handed tools and equipment, for example, making snips in paper with scissors. Understanding the World Children will explore how things work. Expressive Arts and Design Children will make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park. Children will explore different materials freely, in order to develop their ideas about how to use them and what to make. Children will develop their own ideas and then decide which materials to use to express them. Children will create closed shapes with continuous lines, and begin to use these shapes to represent objects.	Physical Development Children will develop their small motor skills so that they can use a range of tools competently, safely and confidently. Expressive Arts and Design Children will explore, use and refine a variety of artistic effects to express their ideas and feelings. Children will return to and build on their previous learning, refining ideas and developing their ability to represent them. Children will create collaboratively, sharing ideas, resources and skills. ELG Physical Development - Fine Motor Skills Children will use a range of small tools, including scissors, paintbrushes and cutlery. Expressive Arts and Design - Creating with Materials Children will safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children will share their creations, explaining the process they have used.	Design Children will design purposeful, functional, appealing products for themselves and other users based on design criteria. Children will generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology. Make Children will select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. Children will select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics. Evaluate Children will explore and evaluate a range of existing products. Children will evaluate their ideas and products against design criteria. Technical knowledge Children will build structures, exploring how they can be made stronger, stiffer and more stable. Children will explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products. Cooking and nutrition Children will use the basic principles of a healthy and varied diet to prepare dishes. Children will understand where food comes from.

At Milford Infants' School, our Design and Technology curriculum is constructed to inspire pupils to think innovatively, inquisitively and to develop their confidence to take risks. We provide varied learning opportunities which aim to develop not only their technical skill in design and technology, but also to develop their wider knowledge of product design and their ability to use vocabulary accurately. We encourage children to use their creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts. Children are encouraged to solve problems both as individuals and collaboratively. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling and testing and to be reflective learners who evaluate their work and the work of others.

Implementation

Design and Technology is taught termly in Key Stage 1 and within the Foundation Stage as part of their Expressive Arts and Design, Physical Development and Understanding of the World. In Key Stage 1 we teach the National Curriculum, supported by a clear skills and knowledge progression. This ensures that skills and knowledge are built on year by year and sequenced appropriately to maximise learning for all children. Teaching of Design and Technology follows the design, make and evaluate cycle. The design process is rooted in real life, relevant contexts to give meaning to learning. Whilst making, children are given a choice and a range of tools to choose freely from. They will have opportunities to adapt and evaluate their own products against a design criteria. The key skills we teach children include sewing and textiles, cooking and nutrition, using materials and mechanical components. When adapting this curriculum to meet the needs of all children especially those with SEND we make reasonable adjustments, using practical, concrete, realistic and stimulating resources to simplify the concepts that are being taught. With support the pupils will overlearn and recap the 'sticky knowledge' and key vocabulary.



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Impact

Through the implementation of the Design and Technology at Milford Infants' School children we aim for the children to have developed their natural curiosity as to how things work and are made and be able to apply this knowledge along with creative thinking to solve problems. They will have a skill set that helps them create and adapt their own designs. The children will be confident to ask questions, try new things, reflect, evaluate and adapt their work as necessary. They will be confident to share opinions and ideas and will take on board the feedback of others. Children will talk about eating healthily, hygiene and kitchen safety when working with food. They will use graters, peelers and knives safely to prepare food. Progress will be monitored through learning walks, work scrutiny, observing the children's work on displays and discussions with the children regarding their ideas, reflections, learning and understanding.