



Nurturing the Future, Inspiring Success

Design and Technology (DT)

Intent

At North Farnborough Infant School we develop and nurture children's creativity through purposeful and engaging designing and making. We promote effective learning and enjoyment in every aspect of Design and Technology; whilst enabling children to successfully participate in a rapidly changing technological world. Our curriculum inspires children to be curious about the world around them and how things work. Children will progress their capability to create high quality products by combining their designing and making skills with their knowledge and understanding. They will refine their skills in order to design and make products that solve real and relevant problems in a range of contexts; make products by using a wide range of materials and learn to use tools safely to cut, shape, join and finish. In addition, children will learn to evaluate products and suggest how they could be improved for example, to be stronger, stiffer and more stable.

Our curriculum follows the aims of the National Curriculum to enable all pupils to achieve the following outcomes:

- Develop the creative, communication, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- Design purposeful, functional and appealing products for themselves and others
- Build and apply a repertoire of knowledge, understanding and skills in order to design
- Make high-quality prototypes and products for a wide range of users
- Critique, evaluate and test their ideas and products and the work of others
- Understand and apply the principles of nutrition and learn how to cook.

Implementation

Whilst the Early Years Foundation Stage (EYFS) and National Curriculum forms the foundation of our curriculum, we make sure that children learn additional skills, knowledge and understanding and enhance our curriculum as and when necessary. Our core values of co-operation, confidence, independence, respect, happiness and responsibility are embedded into our D.T. curriculum.

In the EYFS curriculum, DT is linked with many areas of learning and primarily the area of 'Expressive Arts and Design'. This includes the early learning goals 'Creating with Materials' and 'Being Imaginative and Expressive'. In Year R, children are provided with opportunities to explore and play with a wide range of materials, tools and techniques, experimenting with colour, design, texture, form and function. Children are taught new DT skills during adult led sessions and children use what they have learned independently in their child-initiated time (continuous provision).

Children develop their fine motor skills through using a range of tools to construct, join and fix materials together. They also learn how to construct with a purpose in mind and about planning and adapting initial ideas to make them better.

Provision for opportunities in DT are not limited to inside as children can represent their ideas using large scale equipment outside for example, using the milk crates, guttering and tyres when building a car.

Our long-term plan maps out the themes covered in each term during Key Stage One and our curriculum overview shows the progression of skills across the year in each key stage. In Key Stage One, DT is taught every other half term. Units of learning are delivered three times within the academic year and consist of food technology, materials, textiles, structures and mechanics. Where at all possible, DT learning will begin with an inviting hook, to ensure the tasks and challenges set are as engaging and meaningful as possible.

Cooking and nutrition are taught in all three year groups. Children learn about food, where food comes from and to use the basic principles of a healthy and varied diet to prepare dishes.

Our School uses a variety of teaching and learning styles in DT lessons in order to develop children's knowledge, skills and understanding. Teachers provide a practical curriculum, which involves children taking part in meaningful activities in which they are required to discuss their plans and evaluate their own and other's work in a constructive way. Each project within a DT unit will follow: research, design, make and evaluate elements. These will not necessarily be in this order as we encourage an iterative design process, where designs are revisited and reflected upon at regular points during a project.

Within lessons, we give children the opportunity to work individually, in pairs and in group situations. Children have the opportunity to use a wide range of materials and resources, including Information Technology and will be supported to use tools and equipment safely and responsibly. English, Maths and Computing skills are taught during discrete lessons but are revisited in DT so children can apply and embed the skills they have learnt in a purposeful context.