

Design and Technology

Wherever we look, evidence of design is all around us. From chairs to hospital equipment, from clothes to websites, from advertisements on the side of a bus to playground equipment, everything has been designed. Our curriculum aims to inspire our pupils to think about the important and integral role which design and the creation of designed products play in our society.

Our curriculum is split into three different areas: 'cook', 'sew' and 'build'. It is designed so that each year group will complete a unit of work in these three different areas once a year. Each unit has been devised to be delivered in a five-hour block, once a term, which can be taught over a single day or two half days.

Two different 'aspects' of design are interwoven into the three areas of study: the environment and sustainability, and enterprise and innovation. These 'aspects' acknowledge enduring and contemporary concerns of modern design.

Each unit specifies the concepts and skills which our pupils are expected to learn over the course of a unit. These concepts and skills progress gradually throughout the course of the six years of study.

In 'cook' students learn to cook from recipes which gradually build basic culinary skills, culminating in year six with the creation of a mezze-style meal requiring the pupils to produce various small dishes. Whilst studying these practical skills they learn about concepts relating to food such as nutrition, seasonality, food production, transportation and food from different cultures. Each five hour block of work is split into two, two and a half-hour sessions. In each session the children cook from one recipe.

In 'sew' students practise using fabric and thread to learn basic sewing techniques to create objects which demonstrate embroidery, appliqué, weaving and plaiting. Concepts such as the properties and creation of different fabrics, fast fashion, industrialisation, waste, recycling and pollution are interwoven into these activities. In 'build' students learn about the creation of structures and mechanical and electrical devices to create products such as cars, moving cards, toys and books. This culminates with year six learning to consider the user in real life, designing a water wall for children in reception. Once again, the practical process of de-signing and creating a product is interleaved with learning about concepts which have a bearing on what the students make. These concepts, for example force, motion and the properties of materials are often connected with those encountered in the science curriculum.

The sequence of lessons in the 'sew' and 'build' areas of study follow a structure to enable the pupils to become familiar with, understand and practise the process of design: research and investigate, design, make, use and evaluate. Throughout the

course of the lessons the pupils explore existing products and their uses, generate ideas and designs by creating drawings and prototypes against criteria which they devise having considered purpose, function and appeal. Evaluation against these criteria concludes the process. Discussion is an important part of this process, as is consideration of the properties of potential materials and the choice of tools. Learning about fundamental concepts, skills, developments in history and understanding of the influence of key individuals in the field are interleaved into this process-driven structure. The pupils' understanding of key skills and concepts builds from year to year, assessing and cementing prior learning, and therefore the implementation of the curriculum in the given sequence is crucial.