

Design Technology at Surrey Hills All Saints

Intent, Implementation and Impact

Aims:

The National Curriculum for Design and Technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills to design and 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

Intent:

At Surrey Hills All Saints our aim in Design and Technology is to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We aim to deliver D&T in a practical, inspiring and immersive way through closely linking projects to cross curricula themes or topics wherever possible. Pupils acquire a broad range of subject knowledge and draw on subjects such as mathematics, science, history, geography, computing and art. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to become reflective learners who evaluate their work and the work of others. Our D&T projects encourage curiosity, creativity and imagination to solve real life, relevant problems. Likewise, pupils are given the opportunity to develop their D&T skills through project which reflect and incorporate both past and present products in the world. As they progress through the school, greater emphasis is placed on innovative design and the ability to critique, evaluate and test their ideas and products and the work of others. We aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful, enterprising citizens who will have the skills to contribute to future design advancements. Overall, we aim to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to thrive in an increasingly technological world.

Implementation:

Planning

At Surrey Hills All Saints, we use Kapow Primary to inform the planning of our Design and Technology curriculum. The teaching of Design and Technology in all year groups is based on progressive units which have been thoroughly planned to ensure progression of skills and knowledge. Our Design and Technology curriculum is in line with the National Curriculum which outlines the three main stages of the design process: design, make and evaluate. Each of our D&T units are underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required to complete each project. Each of our D&T projects include four key areas including designing, making, evaluating and using technical knowledge. Our cooking and nutrition units, include a separate section, which focuses on specific principles, skills and techniques in food, including where food comes from, diet and seasonality. Our D&T lessons incorporate a range of teaching strategies from independent tasks, paired and group work including practical hands-on, computer-based and inventive tasks. This variety means that lessons are engaging and appeal to those with a variety of learning styles.

Our D&T unit are organised into the following areas:

- Cooking and nutrition
- Mechanisms/ Mechanical systems
- Structures
- Textiles
- Electrical systems (KS2 only)
- Digital world (KS2only)

In most year groups, Design and technology is timetabled to be taught in three units across the year. Each unit focuses on a different skill and links closely with other areas of the curriculum including science, geography, history, English or maths. These links help the children to develop a wider breadth of knowledge and link it to real life learning.

In KS2 Year 6, pupils undertake the Reach out and Rise (ROAR) project which gives pupils ownership of their projects with the freedom to explore within the broad remit of having a positive impact on the planet.

In the EYFS, DT and the gaining of practical skills runs through the whole curriculum and is child led.

Impact:

Our Design and technology curriculum, enables pupils to leave school equipped with a range of skills to succeed in their secondary education and to become innovative and resourceful members of society.

The expected impact our Design and technology curriculum is that children will:

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes, including models, prototypes, CAD, and products to fulfil the needs of users, clients, and scenarios.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Have an appreciation for key individuals, inventions, and events in history and of today that impact our world.
- Recognise where our decisions can impact the wider world in terms of community, social and environmental issues.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and technology.
- Meet the end of key stage expectations outlined in the National curriculum for Computing.