

# Design Technology



## Curriculum Booklet

# Design Technology Intent

The intent of Tanners Brook Primary School's Design Technology curriculum is to ensure that all children are inspired and motivated by the creative opportunities that the subject offers. We would like Design Technology to be an inspiring, practical subject that encourages all children to strive for their personal best by instilling qualities such as curiosity, enquiry and determination.

It is the intent of Tanners Brook Primary Schools Design Technology curriculum that pupils use their imagination and natural curiosity to think creatively and solve problems both as individuals, and as members of a team.

Children are inspired, engaged and excited through carrying out research, design and make tasks. We want our children to love Design and Technology and understand the opportunities that this exciting lesson can provide, leading to the development of budding designers, carpenters, architects, engineers and more. We aspire for the children to have no limits to their ambitions.

In order for our children to reach their full potential, we will ensure that they acquire subject knowledge; and draw on existing knowledge from mathematics, science, computing and art. This will enable them to unlock their potential, making products that solve problems within a variety of contexts which consider their own and others' needs, wants and values.

The skills developed in Design and Technology, such as evaluating their own designs and the designs of others, can be used across the curriculum and in situations throughout life.

We aim for all pupils to:

- Develop their creative, technical and practical expertise in order to confidently complete a range of tasks.
- Develop skills, and use their creativity and imagination, to design, make and evaluate a range of products that solve real life problems.
- Reflect upon and evaluate their products, its uses and its effectiveness.
- Develop an appreciation of design, and natural curiosity that inspires them to constantly want to strive for their personal best via evaluating their work.

Tanners Brook pupils will not only be equipped to meet the requirements from the National Curriculum, but to also prepare them for the opportunities, responsibilities, and experiences of later life. This will enable all children to achieve their personal best, acquiring fundamental life skills such as feeding themselves healthily and independently, learning where food comes from and making connections with their geographical and scientific knowledge.

# Design Technology Implementation

At Tanners Brook Primary School, and in accordance with the National Curriculum's expectations, we aim 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 upon their knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users.
- Evaluate and test their ideas and products and the work of others.
- Understand and apply the principles of nutrition and learn how to cook.

Key skills and key knowledge for Design Technology are mapped across the school, to ensure progression between year groups.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1		Planning and building a Beebot home.		Designing and making a fruit salad		Moving pictures
Year 2		Moving vehicles		Puppets- sewing		Winding mechanisms
Year 3		Shelter		Pizza		Picture frames
Year 4		Pop up books		Purses and Wallets- sewing		Torches
Year 5		Making bread		Land yachts		CAM toys
Year 6		Slippers	Structures			

This is used to plan lessons, making sure all skills are covered across the academic year. By mapping Design Technology across the school, we provide a context for the children's learning that focuses on the importance of real-life structures and the purpose of specific examples.

At Tanners Brook, Design Technology is taught in every year group, with one unit usually being taught each term. Children at Tanners Brook access all areas

of the Design Technology curriculum with cross curricular links being made where appropriate.

Children across Tanners Brook will follow the 6 principles of Design Technology, following these principles will enable teachers to clearly see the progression of skills, enabling them to build on their existing knowledge and challenge children in line with their year group expectations:

- USER – children will have a clear idea of who they are designing/making the product for.
- PURPOSE – children will be able to communicate the purpose of the product they are designing/making.
- FUNCTIONALITY – children will design a product that works and functions effectively to fulfil the user's needs.
- DESIGN DECISIONS – children will make their own decisions and choices enabling them to design a product that meets the needs of their audience.
- INNOVATION – children will have the opportunity to think creatively, develop and explore their own ideas incorporating the essential skills involved in the process.
- AUTHENTICITY – children will make products that are unique, believable, real, and meaningful to themselves and others.

As part of these 6 principles the children will:

- Research and explore existing products to gain first-hand experience of existing items.
- Children are provided with product to develop for a specific user. They will develop their own designs and initial sketches, using technical

knowledge and vocabulary to add detail to their designs. They will make connections with their learning across the curriculum.

- Showcase their skills in their finished product.
- Children will use a range of tools and materials to make their products.
- Evaluate their finished product.

From September 2022, the children will record their Design and Technology work in a Design and Technology book, this will move up with the children to enable progression of skills to be clearly monitored.