

# Design and Technology Curriculum



## Curriculum Vision and Rationale

Within the Design and Technology curriculum at Kingsthorpe Grove, the key threshold concepts are:

- **Master practical skills**

This concept involves developing the skills needed to make high quality products.

- **Design, make, evaluate and improve products**

This concept involves developing the processes of design thinking and seeing design as a process.

- **Take inspiration from design throughout history.**

This concept involves appreciating the design process that has influenced the products we use in everyday life.

These key threshold concepts have been built into the Design and Technology curriculum, across all year groups. Planning is progressive and previously taught skills are revisited from Years 1 to 6, ensuring children develop deeper understanding of concepts and techniques. Knowledge, skills and understanding are built upon through each of the areas of D&T through designing, making, evaluating, technical knowledge acquisition and through cooking and nutrition.

## Intent

At Kingsthorpe Grove, children will learn Design and Technology as a distinct subject, with curriculum links made when it is suitable to do so. When D&T is taught as a distinct subject there are clear opportunities to develop and strengthen specific skills and knowledge. Children are given opportunities to reflect upon and evaluate past and present design technology, its uses and effectiveness. Concentrating on local and global themes from EYFS to Year 6, we aim to provide children with an exciting, relevant and challenging curriculum with enrichment opportunities becoming an integral feature, thus raising the cultural capital for our learners. The knowledge and skills-based curriculum offered encourages them to become innovators and risk-takers.

Our school drivers are Communication, Aspiration and Respect and these can be seen within the D&T curriculum.

**Communication** – communicate ideas and thoughts through a range of media, encouraging speaking and listening and respecting the thoughts of others.

**Aspiration** – use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, taking inspiration from the greats.

**Respect** – encouraging mutual respect through peer observations and by nurturing a growth mindset which allows students to become risk takers.

## Implementation

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Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in a process of designing, making and evaluating. Key knowledge, skills and vocabulary for D&T have been mapped across the school from EYFS to Year 6 to ensure progression between year groups. This also ensures that there is a context for the children's work in Design and Technology; that they learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study. Each area studied will be revisited prior to a new unit and lessons will be adaptive with teachers offering scaffolding, high quality modelling and opportunities for retrieval to embed in our pupils' long-term memories. D&T is taught as a year group foundation week, once each academic year, and on rotation with art every other half term.

## Impact

At Kingshorpe Grove, the impact for the pupils in D&T will be that pupil voice evidences confident learners who are able to talk about what they have learnt, using subject specific vocabulary that develops over time. They are able to master techniques, refine ideas and take inspiration from the world around them and from experts in their fields. The approach to assessment is less formal than in core subjects. In D&T, there is ongoing teacher assessment to ensure that the children are keeping up with the pace of the curriculum and achieving our goals. Success criteria for projects will be established and measured throughout the design process, the most prominent being the requirement to design a product which is fit for purpose and matches the brief.

## EYFS

In the EYFS design and technology is encompassed within Expressive Arts and Design. Children will explore a range of construction, use different materials to make, look at textures and joining with a range of products. These build towards meeting the following Early Learning Goals:

- Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function
- Share their creations, explaining the process they have used

## Long Term Curriculum Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Exploring materials Continuous provision	Clay lanterns, cards and calendars	Lanterns for Chinese New Year	Junk modelling, paper plate aliens.	African animal models	Flower making
Year 1	DT - food and nutrition Fruit salad	Art	DT - Textiles	Art	DT - Mechanisms and structures Plus - foundation week	Art

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Year 2	Art	DT - food and nutrition Fruit smoothies	Art	DT - Textiles	Art	DT - Mechanisms and structures Plus - foundation week
Year 3	DT - Textiles	Art	DT - food and nutrition Pitta pizzas	Art	DT - Mechanisms and structures Plus - foundation week	Art
Year 4	Art	DT - food and nutrition Bread products	Art	DT - Textiles	Art	DT - Mechanisms and structures Plus - foundation week
Year 5	DT - food and nutrition Spanish omelette	Art	DT - Textiles	Art	DT - Mechanisms and structures Plus - foundation week	Art
Year 6	Art	DT - food and nutrition Seasonal soup	Art	DT - Textiles	Art	DT - Mechanisms and structures Plus - foundation week