



# TOOTING PRIMARY SCHOOL

## DESIGN & TECHNOLOGY

### INTENT

At Tooting Primary School (TPS), we follow a combined Art & Design and Design & Technology curriculum created by Kapow, chosen because of the cross- curricular opportunities for teaching and learning which enhance our core subjects. Our curriculum aims to engage children in practical tasks through which they can draw on skills from other subject areas in meaningful and purposeful ways. Our curriculum combines Design and Technological skills with those of STEM (Science, Technology, Engineering and Maths) so that our pupils learn skills for life. Through continued evaluation of their learned skills, our children will increase their resilience, using mistakes as a driver for refinement and excellence. Our curriculum aims to empower teachers to inspire pupils to create, experience and participate.

Our Design and Technology curriculum aims to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. Our aim is that children will develop the confidence to take risks, through drafting design concepts, modelling, testing models and so become reflective learners who can evaluate their work and the work of others. Through the curriculum 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.

Our curriculum is fully in line with the programmes of study from the National Curriculum, and so enables pupils to meet the end of key stage attainment targets.

## **IMPLEMENTATION**

Our curriculum outlines the three main stages of the design process: design, make and evaluate. Each stage of the design process is underpinned by technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand. Cooking and nutrition\* has a separate section, with a focus on specific principles, skills and techniques in food, including where food comes from, diet and seasonality.

Our curriculum strands:

- Design
- Make
- Evaluate
- Technical knowledge

Cooking and nutrition is given a particular focus in the National Curriculum and is one of the six key areas that pupils revisit throughout their time at TPS. There are half termly cooking sessions for every year group. Pupils respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in the six key areas.

The six key areas are:

1. Cooking and nutrition
2. Mechanisms/ Mechanical systems
3. Structures
4. Textiles
5. Electrical systems (KS2 only)
6. Digital world (KS2 only)

Each of the key areas follows the design process (design, make and evaluate) and has a particular theme and focus from the technical knowledge or cooking and nutrition section of the curriculum. As a spiral curriculum, with key areas revisited frequently with increasing complexity, pupils are always building on their previous learning.

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 range of learning styles. Differentiated guidance is available for every lesson to ensure that learning can be accessed by all pupils and opportunities to stretch pupils' learning are available when required. Knowledge organisers for each unit support pupils in building a foundation of factual knowledge by encouraging recall of key facts and vocabulary.

Design and Technology lessons are taught in our purposeful, well-resourced and dedicated DT room and Cookery room where the children have the space to experiment and explore.

### **IMPACT**

The impact of Kapow Primary's scheme is constantly monitored by teachers through both formative and summative assessment opportunities.

Following the implementation of our Design and technology curriculum, pupils will leave school equipped with a range of skills to enable them to succeed in their secondary education and be innovative and resourceful members of society.

The expected impact of following 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 products, including models, prototypes, CAD, and other 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.