



Southfields Primary School

Design & Technology Curriculum Statement

*Believe in yourself,
Value others.
Be proud of your achievement,
Smile, shine be happy.*

Intent:

Southfields Primary School uses the Kapow scheme of work to aim to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work 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. Effective planning and teaching supports pupils to meet the end of key stage attainment targets in the National Curriculum.

Implementation:

The National Curriculum for Design and Technology 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.

The National Curriculum organises the Design and Technology attainment targets under five subheadings or strands:

- Design
- Make
- Evaluate
- Technical Knowledge
- Cooking and Nutrition

Southfields' long term planning and coverage mapping has a clear progression of skills and knowledge within these five strands across each year group. Our National Curriculum mapping shows which units cover each of the National Curriculum attainment targets as well as each of the five strands. Our Progression of Skills shows the skills that are taught within each year group and how these skills develop to ensure that attainment targets are met by the end of each key stage. Our Long-term Overview combines both Design and Technology and Art. Subjects are alternated through the term. This enables full immersion and coverage of both subjects and ensures time constraints do not result in missed learning.

Throughout the units covered, children will respond to design briefs and scenarios that require consideration of the needs of others, developing their skills in six key areas:

- Mechanisms
- Structures
- Textiles
- Cooking and nutrition (Food)
- Electrical systems (KS2)
- Digital world (KS2)

Each of our 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.

The Kapow Primary scheme that we follow is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build 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 variety of learning styles. Scaffolded guidance is available for every lesson to ensure that lessons 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. Communication in Print is used to include children with communication and language needs.

Impact:

The impact of our Design and Technology teaching is continually assessed through both formative and summative assessment opportunities. Each lesson plan includes guidance to support teachers in assessing pupils against the learning objectives. Furthermore, each unit has a unit quiz and knowledge catcher which can be used at the start and/ or end of the unit.

Pupils should leave Southfields Primary 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 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.

SMSC in Design and Technology:

The teaching of Design and Technology at Southfields offers opportunities to support the social development of our children through the way we encourage them to work with each other in lessons. We allow children to work together and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in Design and Technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.