



# Curriculum Statement – Design and Technology

At The Littletons, our whole curriculum is underpinned by our school vision:

“Just as God has created every individual with unique talents and skills, our school community provides a nurturing and inclusive environment, where everyone is encouraged to explore their individual creativity and to confidently use their talents in order to achieve their God given potential and to make the world a better place.”


Our curriculum fulfils the National Curriculum requirements.

Intent:

# DESIGN AND TECHNOLOGY



We are all challenged, engaged and everyone can join in




We test, explore and evaluate existing products

We learn about real life designers

We aim to inspire pupils to be innovative and creative thinkers who have an appreciation for the product design cycle of designing, making and evaluating products in order to solve real life problems. We develop an understanding of how design and technology impacts on daily life and how they could make the world a better place in the future using their skills. Lessons are hands-on and children can explore new materials and tools to deepen their understanding and skills.

We reflect on our work using technical language



Our lessons link to real life problems

We use different materials and tools

We follow the design, make and evaluate cycle

## Implementation:

In Design and Technology, the curriculum covers the six key areas:

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

Pupils respond to design briefs and scenarios that require consideration of the needs of others. Each of the 6 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. 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 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.

Strong subject knowledge is vital for staff to be able to deliver a highly effective and robust Design and technology curriculum. We are aware that not all teachers feel confident delivering all elements of the Design and Technology curriculum so we make use of the teacher videos to develop subject knowledge and support ongoing CPD to ensure they feel supported to deliver high quality lessons.

Resources are identified in advance of each unit to ensure tools and other materials are available to allow staff to successfully implement the curriculum.

Extracurricular clubs after school often include DT and STEM related activities to enable pupils to further develop their skills and explore their interests.

## Impact:

**By the time children leave The Littletons, we expect them to:**

- 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.

**Children's learning will be assessed through:**

- Formative and summative assessment, including observations of practical techniques during lessons and of final products
- Pupil voice
- Work in sketchbooks