

# Design and Technology Summary-Intent, Implementation and Impact



## Intent

### Design and Technology

At St. Augustine's School, it is our intention to ensure that by the end of their primary education, our children will have experienced an enriching curriculum in DT, which allows 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. Through our DT 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.

## Implementation

The Design and technology National 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.

The National curriculum organises the Design and technology attainment targets under four subheadings: Design, Make, Evaluate, and Technical knowledge. At St Augustine's, we have developed our DT curriculum with the use of the scheme, Kapow, which embeds the following subheadings throughout the curriculum across all year groups.

- Design
- Make
- Evaluate
- Technical knowledge

Cooking and nutrition is given a particular focus in the National curriculum and we have made this one of our key areas that pupils revisit throughout their time in primary school:

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

With the use of Kapow Primary's Design and technology scheme, a clear progression of disciplinary and substantive knowledge within these strands and key areas has been mapped out across each year group to ensure progression.

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. At St. Augustine's, our DT 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. 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.

- Alongside this, the children are taught to consider the work of designers and to sometimes use the examples of designers and craft makers to influence their own work.
- Children are also taught to reflect upon their own work during a lesson or over a series of lessons and to consider ways their work could be improved. Opportunities are provided for children to improve their work in Design and Technology.
- When teachers plan for Design and Technology, they ensure that the vocabulary introduced to the children is age appropriate for the skills they are teaching and that this vocabulary builds up progressively from YR to Y6, developing children's vocabulary that will help them in their secondary school lessons in Design and Technology.
- The curriculum is structured in such a way that the children build upon previously acquired skills progressively. They are required to recall previous learning to help them develop their skills further. By working in this way, we aim that when they leave us in Year 6, the children are prepared to further their enjoyment and experience of Design and Technology in Secondary School.
- Design and Technology skills are assessed by class teachers. The children's responses to questions and design briefs, knowledge catchers and end of unit quizzes allow the teachers to assess the children in terms of their skills development in designing, making, evaluating and use of technical knowledge. It ensures that teachers can then carefully plan for the next steps in individuals learning.

### **Impact**

After the implementation of our Design and Technology curriculum, pupils should 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.

To help achieve high expectations, the Design and Technology curriculum is monitored by the Co-ordinator who carries out lesson drop-ins, book looks and speaks to the children about their work. In working with teachers, the curriculum is evaluated ensuring that the children gain the best provision that we can give them.

The expected impact of 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 outcomes, including models, prototypes, 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.