



### Vision Statement

To creatively design and make products that solve real life problems. Children are given the opportunity to engage in activities to design and make '**something**' for '**somebody**' for '**some purpose**'.

### Subject Link to Values

Design and Technology promotes our whole school values:

**Caring** – At Templemoor, we encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts. Ensuring children care about their own and others' needs, wants and values.

**Achieving** – Design and Technology helps all children to become informed consumers and potential innovators. Children love creating products they can see, touch – and even taste – for themselves. They feel proud to have done so and experience a real sense of achievement.

**Making a Difference** – Design and technology helps to prepare children for the developing world. Through the study of design and technology they combine practical skills with an understanding of aesthetic, social and environmental issues.

**Together** – The subject encourages children to become creative problem-solvers, both as individuals and as part of a team. Since many projects are done via group work, children gain essential communication and teamwork skills.

### Learning Power Links

Design and Technology promotes our whole school learning powers:

**Resilience:** Design and Technology promotes risk taking, solving problems, learning from mistakes in the form of evaluating products and promotes an 'I can do it' mindset.

**Resourcefulness:** Design and Technology encourages children to work together, using resources around them to solve real life problems. It promotes creativity.

**Knowledge:** Through Design and Technology children learn new facts and subject specific vocabulary. Children are encouraged to try out new things, to learn from their mistakes, to develop an open mind and to make good decisions.

**Keeping safe:** Children need to work safely when designing and making products.

**Keeping healthy:** Design and Technology encourages children to think about being healthy in the form of food technology.

**Respectful:** Children are encouraged to be interactive and evaluate their own and others' work in Design and Technology. This promotes respect for the work they have created and understanding that they may have a different solution or idea to somebody else.

## Rights Respecting Links



### Intent, Implementation and Impact Statement

#### **Intent: Why we teach Design and Technology**

At Templemoor Infant and Nursery School, our pupils are offered a Design and Technology curriculum that is broad, balanced, exciting and creative. Our curriculum promotes our whole school values – 'Caring, Achieving and Making a Difference Together'.

We aim to create learning experiences in Design and Technology that help the children to develop core learning powers – a growth mindset, to enjoy challenge, to persevere, to be respectful, to be resourceful, to be healthy and safe and to develop creativity in all areas. We aim to ensure that pupils leave our school with a clear understanding of these core learning powers and how to demonstrate them throughout their lives.

Running through our Design and Technology curriculum is the thread of the UNCRC and we are pleased to be a Rights Respecting Silver School (RRS). Learning opportunities are built into learning projects which help children learn to understand and respect these articles.

Our aim is to inspire children and provide them with skills for life. Pupils will be encouraged to solve real and relevant problems within a variety of contexts to fully equip them with the necessary skills for life.

Pupils will use their own creativity and imagination, to design and produce their own products, considering their own and others' needs, wants and values. Projects within Design and Technology will incorporate other disciplines such as Mathematics, Science, Computing and Art.

Through these learning projects, pupils will learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation. We aim to prepare our pupils for the rapidly evolving world so they are equipped to adapt and adjust the skills they have acquired.

Our Design and Technology curriculum is based on the Early Years Framework and the National Curriculum. Progression documents have been introduced to build on the knowledge and skills needed to meet the end of Key Stage One objectives in the National Curriculum. Our long-term plan is broad and balanced, allowing children to gain an opportunity to practise and experience a wide range of skills and opportunities.

The key skills we aim to embed are:

- To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- To build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- The ability to critique, evaluate and test their ideas and products and the work of others
- To understand and apply the principles of nutrition and learn how to cook.

In the Foundation Stage and throughout Key Stage 1, we focus on the basic skills, exploring and understanding how things work and inspiring the children to have inquisitive personalities. Our pupils are challenged in fun and exciting ways, through a curriculum that offers real-life, purposeful learning

opportunities and first-hand exploratory experiences. Our aim is to inspire children to become the next generation of innovators.

### **Implementation: How we teach Design and Technology**

In Early Years, Design and Technology is explored through the umbrella of 'Expressive Art and Design' and 'Physical Development'. Design and Technology is developed through continuous provision and is accessible in both our creative and construction areas within the classroom. At Key Stage One, we have designed our curriculum to ensure coverage of the National Curriculum content. Our Design and Technology curriculum is enriched and tailored to meet the needs of each year group with schemes of work taken from 'Projects on a Page', produced by the DT Association.

#### **The Early Years Foundation Stage**

In the Early Years Foundation Stage, the essential building blocks of children's Design and Technology skills are established. Children thrive by carrying out challenges set by the teacher. In continuous provision, children are encouraged to think creatively and use resources available in original ways. Our Early Years Practitioners support learning through demonstration, vocabulary rich discussion and enabling play environments. Children are given the chance to work with and explore a range of different materials. They are also encouraged to think critically about what they have created.

#### **Key Stage One**

In Key Stage One, teachers build further on the knowledge and skills gained in Design and Technology during the Early Years. Design and Technology is taught on a rotation with Art and Design, every other half term. It is taught as a discrete subject but it is also integrated into other curriculum areas to create meaningful topic-based learning opportunities.

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an interactive process of designing and making. All teaching of Design and Technology follows the 'Design, Make and Evaluate' cycle. Each stage will be rooted in technical knowledge and real life, with relevant contexts to give meaning to the learning. The children will also consider function and purpose and relate them to context.

The key skills, key knowledge and key vocabulary for Design and Technology have been mapped across the school to ensure progression between year groups. Assessment questions are asked at the start and end of each unit with flashbacks to learning of previous strands and concepts. Through revisiting and consolidating skills, our lesson plans and resources help children build on prior knowledge, alongside introducing new skills, knowledge and challenge. The revision and introduction of key vocabulary is built into each lesson. This vocabulary is then included in display materials and additional resources, to ensure that children are allowed opportunities to repeat and revise this knowledge.

The context for the children's work in Design and Technology is well considered, giving opportunities for children to learn about real life structures and the purpose of specific examples.

High-quality Design and Technology lessons encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own needs and needs of others. Through relevant and meaningful projects, the children are challenged to use their problem-solving skills to find solutions to real life situations.

### **Impact: What Design and Technology gives to our children**

Through our Design and Technology curriculum we aim to ensure the children develop the creative, technical and practical expertise to perform everyday tasks and to participate successfully in an increasingly technological world. We aim to give children a positive attitude to learning and the tools required to work independently. Pupils will work constructively both on their own and in partnership with others.

Pupils will build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. They will be able to critique, evaluate and test their own ideas and products and also the work of others. They will gain the ability to act as designers and makers, selecting their own materials and making informed choices.

Design and Technology is monitored primarily by the subject leader throughout the year in the form of book monitoring. It is important to also look at outcomes and also conduct pupil interviews where the children can discuss their learning and understanding. This establishes the impact of the teaching taking place. Pupil Voice plays an important role in the children's enjoyment, engagement and development and crucially, within a lesson, children are given time to reflect on their learning and take part in self, peer and group feedback. Examples of Design and Technology work are exhibited throughout the school, both on classroom working walls and communal displays.

Ongoing assessments take place throughout the year. Assessments are based on teacher judgement and in each session, any children who are not meeting lesson objectives are recorded and targeted for future support in subsequent lessons. These assessments not only inform future sessions, but also provide an overview of children's progress within their year group's expected outcomes.

Children in the Foundation Stage are assessed within 'Expressive Arts and Design' and 'Physical Development', their progress being tracked termly. Age related expectation levels are reported to parents at the end of the Reception year.

Children will ultimately know more, remember more and understand more about Design Technology. They will demonstrate this knowledge when using tools or skills in other areas of the curriculum, in opportunities out of school and into adulthood.

## **Key Concepts**

**Strand 1:** Design

**Strand 2:** Make

**Strand 3:** Evaluate

**Strand 4:** Technical Knowledge

## **Enriching the Curriculum (Cultural Capital)**

- Year group assemblies to showcase Design and Technology achievements.
- Learn about technological advances.
- Learning linked to real life situations (i.e. designing a healthy drink for a new café that is opening in Sale Moor)
- Exploring a balanced food plate to know how to construct a balanced diet
- Trying new foods and exploring different taste combinations
- Life skills of safe cutting