



Intent

The Design and Technology curriculum at St Bernadette is designed to support our aims for our children at St. Bernadette:

- The ability to analyse and solve problems; to seek and interpret appropriate evidence; to consider and apply solutions.
- Making use of the child's own environment and experiences, to extend the child's desire for knowledge, developing an appreciation of the concepts of time and place and an understanding of the factors influencing the development of the human and natural world.
- Through the provision of creative and expressive experiences, to enable the child to develop imagination and sensitivity, acquiring an appreciation of the Arts.

Our Design and technology curriculum has been developed by staff to ensure full coverage of the National Curriculum (2015) and to inspire our children to be innovative and creative thinkers who have an appreciation for the product design cycle through ideation, creation, and evaluation. We want our children 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 in a stimulating, engaging and challenging learning environment. The curriculum aims 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.

Here at St. Bernadette, we follow the National Curriculum (2015) using the Kapow Primary Scheme to support our Design and Technology teaching. Topics are taught from EYFS all the way through to Y6 as part of a spiral curriculum which we believe gives children the opportunity to constantly develop and build upon existing skills. So that our EYFS (Reception) children have the opportunities to work towards the Development matters statements and the Early Learning Goals and it enables our older children to meet the aims and end of key stage attainment targets in the National curriculum.

Foundational Skills

In the Design and Technology curriculum for the **Early Years Foundation Stage (EYFS)**, foundational skills focus on helping children explore, create, investigate, and solve simple problems through hands-on experiences. Although DT is not a separate EYFS subject, its skills are embedded across areas such as Expressive Arts and Design, Physical Development, and Understanding the World.

In **Key Stage 1 (KS1)**, Design and Technology builds on EYFS experiences and introduces more structured designing, making, evaluating, and technical knowledge. Foundational DT skills at this stage help children become creative problem-solvers and confident makers.

In **Key Stage 2 (KS2)**, Design and Technology develops children's ability to design, make, evaluate, and apply technical understanding with increasing independence and accuracy. Pupils move from simple practical tasks to more thoughtful problem-solving and purposeful product design.

Implementation

Design and Technology is taught consistently, once a week for half of each term, alternating with Art. Whenever possible, it is taught in context to other areas of the curriculum. For example, with maths; 2D/3D shapes, History; Vikings and Romans structures, Computing; coding and information technology, Science; forces and electricity.

Each of our lessons follow our common format:

Revise- FFB	Four From Before- Children complete this at the beginning of a lesson. FFB is four questions based on knowledge each child should have; from their current topic, previous topics in the academic year and the School years prior.
Teach	The teacher introduces new learning making links on a foundation of prior knowledge and vocabulary to support and teach all pupils.
Investigate/ Research	Children used new learned skills along with existing ones to explore and justify what they have learnt.
Demonstrate/ Apply	Children rationalise their new knowledge and learning by applying it either in their investigative or research based work or written activity.
Extend	Children are given the opportunity to extend and transfer their learning in the form of a green challenge.

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 five subheadings or strands:

- Design
- Make
- Evaluate
- Technical knowledge
- Cooking and nutrition*

Our annual Design and technology curriculum has a clear progression of skills and knowledge within these five strands across each year group. It maps out how the units cover each of the strands and their National Curriculum attainment targets. Our Progression of skills shows the skills and knowledge that are taught within each year group and how these skills develop to ensure that attainment targets are securely met by the end of each key stage.

Through our curriculum, our children respond to the design briefs and scenarios for each unit that require consideration of the needs of others, developing their skills in six key areas:

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

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. Our curriculum is designed as a spiral curriculum, with the key areas revisited again and again with increasing complexity, allowing our children to revisit and build on their previous learning.

Our 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. Every lesson is scaffolded 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.

A strong subject knowledge is vital for our staff to be able to deliver a highly effective and robust Design and technology curriculum. Using the Kapow Primary scheme to support

our curriculum, helps to develop subject knowledge and support ongoing CPD with the many teacher lesson videos. This ensures that our teachers feel confident delivering a full Design and technology curriculum and that they feel supported to deliver the lessons at a high standard that ensures our children's progression.

Impact

If asked, the children will tell you all about what they enjoy about Design and Technology using vocabulary relevant to their age and learning. The children at St Bernadette look forward to their Design and Technology lessons and are engaged throughout; Teachers will confirm this.

Our children should leave St Bernadette's 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 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, 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