



SS. Peter and Paul

Roman Catholic Primary School

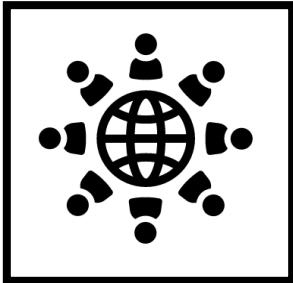


Design and Technology Curriculum



Design and Technology at SS. Peter and Paul

Curriculum Intent



St Peter and St Paul's Catholic Primary School understands that Design and Technology allows pupils to solve problems, think creatively and develop ideas. We ensure the subject is fully inclusive to every child. Our intent is to fulfil the requirements of the National Curriculum for Design and Technology by providing a broad and balanced curriculum. We intend to ensure the progressive development of knowledge and skills, enabling children to learn how to take risks, become resourceful, innovative, enterprising and capable global citizens. Through the evaluation of past and present Design and Technology, we intend to develop a critical understanding of its impact on daily life and the wider world. This subject offers pupils a chance to use creative thinking and activity within a defined purpose and tangible outcome. Our school is committed to nurturing pupils' curiosity and creativity, as well as preparing them for living in a modern world where technology is rapidly changing and advancing.

By teaching Design and Technology, we aim to help pupils:

- ◇ Develop their design and making skills.
- ◇ Develop their knowledge and understanding of design and technologies.
- ◇ Use a wide range of tools and materials.
- ◇ Learn about working safely and using protective measures.
- ◇ Work individually and collaborate with other pupils in a variety of contexts.
- ◇ Develop the capability to create products of a high standard through skills and understanding.
- ◇ Evaluate products, made by themselves, their peer groups and external companies.
- ◇ Explore the man-made world and encourage discussion of how we live and work within it.
- ◇ Develop an interest in and an understanding of technological processes and the role of manufacturing in society.
- ◇ Learn the principles of nutrition, healthy eating and how to cook.



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Curriculum Implementation



The teaching and implementation of the Design and Technology Curriculum at SS. Peter and Paul's Catholic Primary School is based on the National Curriculum and linked to specific units of work to ensure a well-structured approach to this creative subject. The children are taught Design and Technology each term with learning focusing upon the design, make and evaluate process. Areas covered include moving Minibeasts, Puppets, British Inventors, Building Bridges and Seasonal food. More details can be found in the Design and Technology Termly Overview Plan.

Early Years Foundation Stage :

Pupils explore and use a variety of media and materials through a combination of child initiated and adult directed activities. They have regular opportunities to:

- ◇ Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.
- ◇ Share their creations, explaining the process they have used.

By the end of KS1, pupils will be taught to:

Design

- ◇ To design purposeful, functional and appealing products for themselves and other users based on design criteria.
- ◇ To generate, develop, model and communicate their ideas through talking, drawing, templates and mock-ups and, where appropriate, information and communication technology.

Make

- ◇ To select from and use a range of tools and equipment to perform practical tasks, e.g. cutting, shaping, joining and finishing.
- ◇ To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.

Evaluate

- ◇ To explore and evaluate a range of existing products.
- ◇ To evaluate their ideas and products against design criteria.

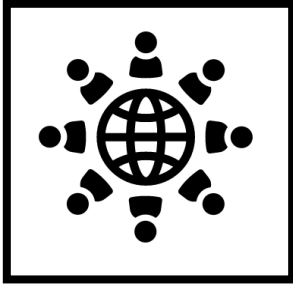
Technical knowledge

- ◇ To build structures, exploring how they can be made stronger, stiffer and more stable.
- ◇ To explore and use mechanisms, e.g. levers, sliders, wheels and axles, in their products.



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Curriculum Implementation



By the end of KS2, pupils will be taught to:

Design

- ◇ To use, research and develop design criteria to inform the design of innovative, functional and appealing products that are fit for purpose, aimed at particular individuals or groups.
- ◇ To generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

- ◇ To select from and use a wider range of tools and equipment to perform practical tasks accurately, e.g. cutting, shaping, joining and finishing.
- ◇ To select from and use a wider range of materials and components, including construction materials, textiles, and ingredients, according to their functional properties and aesthetic qualities.

Evaluate

- ◇ To investigate and analyse a range of existing products.
- ◇ To evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- ◇ To understand how key events and individuals in Design and Technology have helped shape the world.

Technical knowledge

- ◇ To apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- ◇ To understand and use mechanical systems in their products, e.g. gears, pulleys, cams, levers, and linkages.
- ◇ To understand and use electrical systems in their products, e.g. series circuits incorporating switches, bulbs, buzzers and motors.
- ◇ To apply their understanding of computing to program, monitor and control their products.



Design and Technology at SS. Peter and Paul

Curriculum Impact



The impact of the Design and Technology Curriculum at SS. Peter and Paul's Catholic Primary School is that children will be prepared to take part in the development of tomorrow's rapidly changing world. We aim to encourage children to become creative problem-solvers, both as individuals and as part of a team. Through the study of Design and Technology, children combine practical skills with an understanding of aesthetic, social and environmental issues, as well as of functions and industrial practices. This allows them to reflect on and evaluate present and past design and technology, its uses and its impact. We focus on progression of knowledge and skills and discreet vocabulary progression also form part of the units of work.

We measure the impact of our curriculum through ongoing termly assessments, which link to the Progression of skills and this takes place throughout the academic year. Teachers use this information to inform future lessons; ensuring children are supported and challenged appropriately. This data is analysed on an annual basis to inform and address any trends or gaps in attainment.

Children in Foundation Stage are assessed within Expressive Art and Design and their progress is tracked daily by the Foundation Stage teaching staff through the Tapestry App, which informs future planning. Parents are informed at the end of Reception if the children have reached the ELG expected standard for their age.



Y3 Light-up Signs











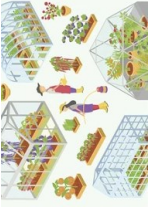



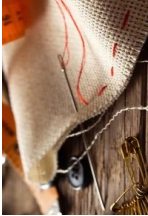





Y2 Perfect Pizzas



Y5 Fashion and Textiles



Year Group	Autumn Term	Spring Term	Summer Term
Reception	Please refer to the document entitled EYFS Art and Design Overview for coverage of Design and Technology in the Foundation Stage		
Year 1	 Eat more Fruit and Vegetables	 Moving Minibeasts	 Stable Structures
Year 2	 Perfect Pizzas	 Vehicles	 Puppets
Year 3	 British Inventors	 Light up Signs	 Storybooks
Year 4	 Seasonal Stockings	 Mini Greenhouses	 Seasonal Food
Year 5	 Building Bridges	 Chinese Inventions	 Fashion and Textiles
Year 6	 Burgers	 Birdhouses	 Programming Pioneers