

Intent

At Phoenix St Peter, our inspiring and practical curriculum develops children's skills through collaborative working and problem solving. It allows children to evaluate past and present Design and Technology, to give them a critical understanding of its impact on daily life and the wider world.

Children apply a repertoire of Design and Technology knowledge to bring their learning to life. They make decisions for themselves and combine their design and making skills to create high quality products. Children will also learn how to cook, whilst applying the principles of nutrition and healthy eating.

Throughout our Design and Technology units, children learn to be fearless when it comes to creating. They try new things, take risks and are flexible with their ideas, whilst critically evaluating their work. They encourage children's creativity and encourages them to think about important issues. They learn about the designed and made world and how things work.

Children will be given the opportunity to draw on other subject disciplines such as mathematics, science, engineering, computing and art to become innovative, resourceful and enterprising. They will be able to perform every day Design and Technology tasks and be prepared to successfully participate in an increasingly technological world.

Implementation

Through Design & Technology projects, children will learn the following:
Designing:

- Researching using surveys, interviews, educational visits, questionnaires and the Internet to generate innovative ideas.
- Developing a simple design specification to guide their thinking about the purpose of the product and how it meets the needs and preferences of individuals or groups.
- Developing ideas for their designs through a variety of visual forms, including using computer-aided design.
- Presenting, clarifying and discussing ideas that highlight particular features that will appeal to intended users as well as areas that can be improved. Giving consideration to time and financial restraints.

Making:

- Making use of a wide selection of tools and explaining their choices in relation to the skills and techniques being used.
- Explaining their selection of a variety of resources such as construction materials and kits, textiles, food ingredients, mechanical and electrical components.
- Using measuring and cutting and different methods to assemble and join materials and components.
- Completing products through a range of finishing techniques.

Evaluating:

- Evaluating the quality of their ideas, design, manufacture and fitness for purpose, against their original design specification and considering the views of others to improve their work.
- Investigating and analysing a range of existing products.
- Understanding how events & people have helped shape the world.

Each project has a list of key vocabulary, appropriate for the year group.

Cross-curricular projects will give children opportunities to learn technical knowledge and apply their understanding of it to strengthen, stiffen and reinforce complex structures; use mechanical systems such as gears, pulleys and levers; incorporate electrical systems in products and apply computing to programme, monitor and control them. Children will learn the principles of a healthy and varied diet, how to prepare and cook meals using a range of cooking techniques, the concept of seasonality and where and how ingredients originate.



Design and Technology Curriculum

Impact

Our Design and Technology curriculum is planned to demonstrate skills, knowledge and vocabulary progression to ensure age related attainment at the end of each Key Stage. Upon completion of each unit teachers will assess children against the progression of skills and knowledge document.

Each project's clear structure allows pupils to demonstrate:

- Research and designing skills
- Sharing and discussing their designs with others
- Making skills using a variety of tools, materials and techniques
- Evaluation and appreciation of their own and other's work through gallery events and peer discussion
- Realise a final outcome using a variety of media and techniques
- Preparing a variety of meals using different cooking techniques, whilst applying the principles of seasonality and a healthy and varied diet.

Termly assessment will take place to track children's progress against age related expectations for Design and Technology.