

DT CURRICULUM GUIDANCE

*“Design is not just what it looks like,
design is how it works.”*

*Steve Jobs, American inventor, designer and entrepreneur
co-founder, Chief Executive and Chairman of Apple*

Design Technology Intent

At St. Andrew's, our aim is to ensure that all of our children receive high quality teaching in Design Technology that is inspiring, rigorous and practical.

We want children to acquire a range of subject knowledge through cross-curricula teaching with maths, science, computing and art.

Design Technology is a foundation subject in the National Curriculum, we use planning from the Lighthouse Schools Partnership to form the basis of our design technology curriculum which is carefully mapped out to ensure a clear progression of knowledge, skills and vocabulary across the primary range. Children deepen their problem-solving skills by designing and make products that solve real and relevant problems within a variety of contexts, considering the needs, wants and values as specified in the design criteria.

Through the evaluation of past, present and their own design and technology, children develop a critical understanding of daily life and the wider world.



Design Technology Implementation

Design

- Research for development of innovative products that fit the purpose.
- Create products that are purposeful, functional and appealing.
- KS1: Communicate ideas through talking, drawing, making and using ICT.
- KS2: Communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design.

Make

- Use a range of tools and equipment to perform practical tasks.
- Use a wide range of materials and components.

Evaluate

- Explore a range of existing products.
- Assess their products against design criteria.

Technical Knowledge

- Build structures, exploring how they can strengthen and reinforce.
- Use mechanisms. levers, sliders, wheels and axles
- KS2 mechanisms: gears pulleys, cams and linkages.
- KS2: Use electrical circuits, switches, bulbs, buzzers and motors
- KS2: Use ICT to program, monitor and control their products

Cooking and Nutrition

- Use the basic principles of a healthy and varied diet to prepare dishes.
- Understand where food comes from.
- KS2: Understand seasonality and how food is grown, reared, caught and processed.
- Cook a variety of dishes using a range of cooking techniques.

Design Technology Impact

St Andrew's curriculum for design and technology aims to ensure that:

- Children develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- Children 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.
- Children critique, evaluate and test their ideas and products and the work of others.
- Children understand and apply the principles of nutrition and learn how to cook.
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“The designer does not begin with some preconceived idea. Rather, the idea is the result of careful study and observation and the design a product of that idea.”

*Paul Rand, Graphic Designer and Art Director
best known for corporate logo design, including IBM*

