



Design and Technology at Benhall St. Mary's C of E Primary School

Intent

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At Benhall St. Mary's, we aim to inspire pupils to become innovative and creative thinkers with an appreciation of the complete design process: **investigate, design, make and evaluate.**

We want our children to:

- Be inventive, resourceful and solution-focused.
- Understand how products are designed for a purpose and a user.
- Develop competence in using tools, materials and components safely and effectively.
- Apply technical knowledge when designing and making.
- Take risks, persevere and learn from mistakes.
- Evaluate their own work and the work of others critically and constructively.
- Recognise the impact of design and technology in everyday life.
- Develop an awareness of sustainability, nutrition, safety and responsible use of resources.

Key Concepts:

Function, Purpose, User, Design, Innovation, Construction, Mechanism, Structure, Evaluation, Sustainability, Nutrition, Safety, Resilience, Problem-solving

Implementation

Design and Technology is taught through the **Projects on a Page** planning approach developed by the Design and Technology Association.

Each project includes:

- A clear *design brief*
- An identified *user*
- A meaningful *purpose*
- Opportunities to *investigate, design, make and evaluate*
- Explicit teaching of *technical knowledge and practical skills*

Projects are carefully sequenced so that pupils revisit key concepts and skills with increasing complexity as they move through the school.

The Design Process

Children are taught that effective design is an *iterative process*.

Investigate

Pupils explore existing products, identify needs, research users and gather information.

Design

Pupils generate ideas through discussion, sketches, annotated drawings and planning.

Make

Pupils select appropriate tools, materials and techniques to create a product.

Evaluate

Pupils test their product, compare it against the design criteria and suggest improvements.

Teaching Approaches

Lessons include a range of strategies:

- Practical hands-on activities
- Investigation and experimentation
- Teacher modelling
- Collaborative problem-solving
- Discussion and questioning
- Independent application
- Testing and refinement
- Reflection and evaluation

Teachers adapt learning to ensure all pupils can access the curriculum while providing appropriate challenge for those ready to deepen their understanding.

Impact

By the end of each year, and by the time pupils leave Year 6, we want children to:

- Understand and apply the full design process.
- Work safely and competently with a range of tools and materials.
- Use technical vocabulary accurately.
- Make informed decisions about materials, structures and mechanisms.
- Demonstrate resilience when designs do not work first time.
- Evaluate products thoughtfully and suggest meaningful improvements.

- Recognise the value of design in everyday life.
- Communicate ideas clearly through drawings, models and discussion.

Children's work will demonstrate increasing independence, technical fluency, creativity and problem-solving capability.