

Design & Technology Curriculum Statement

Intent

At Waddington Redwood Primary Academy, the Design and Technology curriculum is designed to inspire pupils to become creative, practical problem-solvers who can respond to real-life challenges with confidence and innovation. Rooted in our core values of contentment, curiosity, communication and citizenship, we aim to equip pupils with the knowledge, skills and attitudes needed to thrive in an ever-changing world.

Contentment – We nurture pride and satisfaction in making. Pupils develop resilience, perseverance and a sense of achievement through designing, creating and evaluating purposeful products.

Curiosity – Pupils are encouraged to ask questions, explore possibilities and investigate materials, tools and technologies. We foster an inquisitive mindset that drives experimentation and innovation.

Communication – We develop pupils' ability to express ideas clearly through sketches, models, technical language and discussion, enabling them to work collaboratively and articulate design decisions.

Citizenship – Pupils learn to design with purpose and responsibility, considering sustainability, user needs and the wider impact of their creations on society and the environment.

Our curriculum ensures progression in key areas including mechanisms, structures, textiles, food and nutrition, and electrical systems, alongside an understanding of design processes (design, make, evaluate). We aim for all pupils to leave primary school as capable designers and informed consumers.

Implementation

Design and Technology is delivered through a carefully sequenced curriculum that builds knowledge, skills and vocabulary progressively across all year groups.

Curriculum Structure

Units are organised around meaningful design challenges, often linked to real-life contexts or cross-curricular themes.

Each unit follows the design process cycle:

Design – Research, generate ideas and plan

Make – Select tools, materials and techniques to construct products

Evaluate – Reflect on effectiveness and suggest improvements

Embedding Our Values

Contentment - Pupils reflect on their work and celebrate outcomes.

A culture of perseverance is promoted through iterative design and improvement.

Curiosity - Opportunities for exploration and experimentation are planned into every unit.

Pupils are encouraged to ask "What if?" and test ideas.

Communication - Teaching explicitly develops technical vocabulary and presentation skills.

Pupils explain and justify design choices orally and in written or visual form.

Collaborative work supports dialogue and shared problem-solving.

Citizenship - Projects include consideration of sustainability, ethical sourcing and environmental impact.

Pupils design for real users, developing empathy and awareness of diverse needs.



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Teaching Approaches

- Practical, hands-on lessons that prioritise active learning.
- Modelling of skills and techniques by teachers.
- Opportunities for independent and group work.
- Use of high-quality resources and tools to ensure authentic experiences.

Assessment

Ongoing formative assessment through observation, questioning and evaluation of outcomes.
Pupils are encouraged to self- and peer-assess against design criteria.
Knowledge and skill progression is tracked to ensure coverage and attainment.

Impact

The impact of our Design and Technology curriculum is evident in pupils who are confident, thoughtful and skilled designers.

Pupils will:

Demonstrate pride and satisfaction (**contentment**) in their creations and show resilience when improving their work.

Exhibit **curiosity**, asking questions, exploring ideas and experimenting with materials and techniques.

Communicate effectively, using appropriate technical vocabulary and clearly explaining their design thinking.

Show strong **citizenship**, understanding the importance of designing responsibly with consideration for people, communities and the planet.

By the end of Key Stage 2, pupils will be able to:

- Apply a range of skills competently across different D&T disciplines.
- Follow the design process independently with increasing sophistication.
- Evaluate their work critically and constructively.
- Understand how Design and Technology shapes the world around them.

Ultimately, our curriculum prepares pupils to be innovative thinkers, collaborative workers and responsible citizens, ready for the opportunities and challenges of the fu