

Design and Technology Intent, Implementation, Impact statement

Design and Technology National Curriculum 2014

Purpose of study

Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Aims

The national curriculum for design and technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- 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
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook

Design and Technology Intent

Our curriculum is shaped by our school vision which aims to enable all children, regardless of background, ability, additional needs, to fly high and to reach their full potential, within the love of Jesus.

The Design and Technology curriculum at Newton Solney has been designed for all children with these goals in mind:

- To build on our children's natural creativity and curiosity.
- To provide a safe and stimulating environment to develop designing, making and evaluating skills.
- To encourage logical thinking and problem solving skills.
- To develop the children's practical skills to work with a wide range of materials, components and equipment.
- To promote responsibility and independence.
- To encourage a positive attitude towards Design and Technology and a willingness to improve their work and to co-operate with one another.
- To ensure the Design and Technology curriculum is accessible for all.
- To prepare children for participation in an increasingly technological society.
- To promote the spiritual, moral, cultural, mental and physical development of pupils and prepare them for the opportunities and responsibilities and experiences for later life.
- To understand the importance of a healthy life style and be confident to learn some basic cooking skills.

Implementation

At Newton Solney Design and Technology is taught within cross curriculum topics based on a book in KS1 and within child orientated topics in Reception. This ensures children's interests and the same standards across all written work. Knowledge builds progressively

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from Reception to Year 1 to Year 2 with knowledge reviewed and consolidated. Tasks are selected and designed to provide appropriate challenge for all learners, in line with the school's commitment to inclusion. Cross curricular outcomes in Design and Technology are specifically planned for, with strong links between Design and Technology and Literacy lessons. Lesson plans and work in books clearly show the design process where each project follows: research, design, make and evaluate. Health and safety is given high priority and this is particularly true at Forest School when children handle tools. Collaborative learning is important and children take part in group challenges particularly during our focused STEM week when children from all year groups take part in designing and building problem solving challenges.

Impact

Outcomes in topic and literacy books, evidence a broad and balanced Design and Technology curriculum and demonstrate children's acquisition of identified key knowledge. Children review their successes in achieving the lesson objectives at the end of every session. Children progress throughout the school, developing as designers, builders and problem solvers who can work collaboratively to achieve a goal, learning and developing skills they can use beyond school and into adulthood. Design and Technology helps to develop children's spiritual, moral, social and cultural learning.