



Design and Technology Intent

Why do children at Kneesall study Design and Technology?

Many pupils from our community are extremely creative and resourceful. Through the DT curriculum, children can apply these skills to empathise with others and create solutions that meet the needs of others. Pupils will develop the ability to see a process through from start to finish by developing perseverance to design, make, test, evaluate and amend their creations, seeing the rewards of sticking at something for its entirety. In addition, pupils are given opportunities to evaluate past and present design and technology, in order to help them develop a critical understanding of the impact of Design and Technology has on daily life and the wider world. Part of the DT curriculum at Kneesall is focused on cooking and nutrition and includes opportunities for pupils to understand the principles of a balanced diet, nutrition and healthy eating. Through food education, children will be taught how to prepare and cook meals themselves, developing a life skill that will enable pupils to feed themselves and others affordably and well, now and in later life. By studying DT, pupils learn how to assess risk and become resourceful, innovative, enterprising and capable citizens.

What are the aims for the Design and Technology curriculum?

- To follow a design brief in order to create a product that solves a problem
- To create prototypes and products safely and of a high quality
- To evaluate their own work and the work of others in a mature and constructive way
- To cook meals based on ingredients that are affordable and readily available

What are the local area / community links/ special historical features in the area?

Visits from/ to: Nottingham Industrial Museum, Hay Barn, supermarkets, North Leverton windmill.

What links to careers can be made through the Design and Technology curriculum?

Children are introduced to well-known individuals that have had careers in Design and Technology industries and the different career options available such as: Costume designer, Fashion design assistant, Fashion designer, Footwear designer, Hat designer/milliner, Textile designer, Food process worker, Meat process worker, Product/process development scientist, Production manager, Quality manager, Animator, Computer games designer, Web designer, Architect, Product designer, Engineer



How are British Values taught through Design and Technology?

The DT curriculum delivers British values through pupils developing a greater sense of awareness of the world around them and the needs of others.

The Rule of Law- Pupils undertake safe practices, developing an awareness of health & safety for themselves and others when working practically. Pupils are taught the social skills around behaviour self-regulation to ensure collective responsibility for a safe and efficient working environment.

Tolerance of those with different faiths and beliefs- In food education, pupils look at cultural influences on the food we cook and the diversity of ingredients available for us to cook with. They also learn about staple foods of other countries.

Individual Liberty- Pupils explore how products contribute to lifestyle and consumer choices and understand how products evolve according to users' and designers' needs, beliefs, ethics, and values.

Mutual Respect- Pupils are taught about the moral choices facing designers & manufacturers when deciding on materials. Pupils consider sustainability to understand and apply ways of conserving the earth's resources.

Design and Technology Implementation

Pupils will then follow a set of processes to produce a product.

The processes are:

- Research- explore- disassemble, investigate existing and historical products
- Design- functional, appealing products linked to a design brief
- Technical Knowledge- apply technical understanding to develop structures, mechanisms and incorporate electrical systems into products
- Make- select tools, equipment, materials and components to perform practical tasks
- Evaluate- processes, products

Monitoring, Progression and Assessment

Floor books and pupil voice allow the subject to be monitored closely as well as observations and collaborative work. Children should be able to talk about the knowledge categories and there should be clear differences between children in different year groups. We expect to see differences in the way children approach the task and how articulate and expressive they are about their learning.

Assessments are made at the end of each term to determine at what level of understanding each child is working towards. This will include retrieval of key knowledge based facts alongside discussion with the child about the work they have produced.