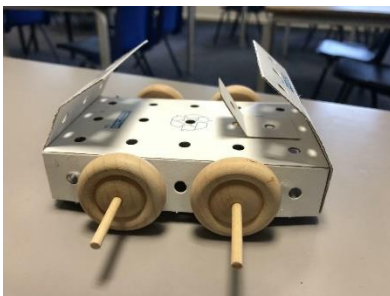


Design Technology at Thornton Primary School

Design Technology Intent:

The teaching of Design Technology at Thornton Primary School will help pupils to develop the skills and practical expertise needed to participate in an ever increasing technological world. Our scheme of work will provide pupils with opportunities to:

- Design and make products that solve both real and relevant problems within a variety of contexts to design criteria.
- Be able to clearly state the purpose of their products.
- Draw on their own experiences and also their use of existing products.
- Explore materials, components and construction kits.
- Provide the opportunity to design and make prototypes based on their own research through a variety of design and make assignments (DMAs). They will have the opportunity to test and evaluate their own work and the work of others and modify their end products.
- Select from a range of materials and equipment and be able to explain their choices. They will also experience a variety of different ways to assemble, join and combine materials using a range of different techniques and also investigate how to make structures stronger, stiffer and more stable.
- Be able to clearly state how their products work using their developing technical language and drawing on their knowledge and understanding of other subjects that link such as Science, Mathematics and Computing.
- Be introduced to a range of mechanisms that provide different types of movement.
- Be able to name and sort foods into the main five groups from 'The Eatwell Plate' and know that everyone should eat five portions of fruit or vegetables a day.
- Learn skills and techniques such as cutting, peeling and grating safely and have the opportunity to cook a range of dishes.
- Explore the use of Information and Communication Technology.
- Be inspired by inventors, designers, engineers, chefs and manufacturers who have developed ground breaking products. Be encouraged themselves to be inventive and innovative and inspire the next generation of design engineers.



Where we are with Design Technology:

Children are introduced to a range of carefully selected exploration and design and make tasks as they progress through KS1 and KS2. Design Technology lessons are blocked into theme days or form a short series of weekly lessons. Careful selection of tasks ensures progression in terms of knowledge, skills, techniques and technical vocabulary development. The children have opportunities to apply these to design and make tasks as they further progress up the school. There are many opportunities for recapping of knowledge and skills as links to previously learning are incorporated into teaching.

Tasks have been designed to enable children to work from a variety of starting points to put their work into context. These starting points may be from stories in KS1 to local, industrial and wider environment contexts as pupils move up the school.

Children are encouraged to think about who the products they design and make are for and their purpose. Gathering of information about the needs and wants of individuals will start to form part of the design process in early KS2, this research becoming more extensive. Children will be asked in Key Stage 1 to explain how their product works progressing to more detailed explanations in KS2 drawing on their knowledge of Science where relevant. In KS1, children are limited to a number of simple design criteria to help them to develop their ideas progressing onto generating their own design criteria. As children progress, they will be encouraged to draw on familiar products and also utilise their experiences of Design Technology to generate ideas for their own designs. In KS2, they will be introduced to the work of designers, inventors, engineers, chefs and manufacturers to inspire them. Children will progress from making templates and mock-ups in KS1 to model their ideas using prototypes and pattern pieces.

Simple design sketches in KS1 are developed into a variety of detailed, annotated sketches in KS2. As children progress further, they will be encouraged to become independent in choosing which type of drawing best suits their product design. Children will be encouraged to consider how realistic their designs are and be encouraged to start to become increasingly innovative whilst still ensuring their final outcomes are fully functional and fit for purpose.

How we are developing Design Technology:

- Developing the use of children's vocabulary.
- Introduced to the work of designers, inventors, engineers, chefs and manufacturers to inspire them.
- Opportunities for children to experience the use of Information Technology.

Impact of Design Technology:

Children's knowledge, skills and their application will increase as they progress through the planned Design and Make Assignments. Children will become inspired through their learning based on inventors, engineers, designers and Design Technology will have a greater prominence in school.

How we measure impact:

- Assessment tasks and regular knowledge check activities.
- In school attainment tracking
- Engagement in enrichment activities
- Route to Resilience activities
- Pupil voice – questionnaires, pupil book and learning reviews
- Subject Leader monitoring – Lesson visits, scrutiny of books, assessment, pupil interviews and questionnaires
- Governor monitoring
- Attendance data
- Behaviour Logs

Data: % Expected+ (2023-2024)

Y1: 100%	Y4: 100%
Y2: 93%	Y5: 95%
Y3: 100%	Y6: 93%