



PROUD to be **FOREFIELD**: Passion, Respect,
Opportunity, Unique, Determined



Subject Leader Report: Design Technology

Design and technology is a valued part of the curriculum at Forefield Junior School inspiring children through its practical elements. 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 other areas of the curriculum such as mathematics, science, engineering, computing and art.

Design and Technology aims to:

- 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 wealth of knowledge, understanding and skills in order to design and make high quality prototypes and products for a wide range of uses.
- Allow pupils to 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.

In addition to the curriculum, our Pupil Guarantee aims to ensure that **every** child finds their passion through:

- Regular experiences of the Arts - *on stage, as an audience and as an artist/musician, enjoying a range of styles and influences;*
- Encountering a variety of sporting activities - *competing at individual and team level, and pursuing this interest beyond the school or just for fun;*
- Developing a curiosity about the world around them - *through science, nature or learning about other cultures, and discovering a sense of wonder;*
- Making healthy lifestyle choices - *knowing how to eat well, exercise and promote their own well-being;*
- Extending their learning through visits and visitors - *opening their eyes to the world beyond the school walls, culminating in a residential visit to Ambleside in Year 6.*

From each experience, pupils can gain the strength to know that it is OK to be different and to encourage and appreciate the success of their friends.

British Values

Our Design Technology lessons are an ideal opportunity to reinforce the British Values of: Democracy, Law, Liberty, Mutual Respect and Tolerance.

Democracy

The children must take the views and opinions into account but still have the right to make their own choices.

To take turns both in speech and practically with others.

To understand that it is not always possible or right to have their own way and understand the value of compromise.

The rule of law

To understand the importance of safety rules when using tools.

To understand and accept that if these rules are not followed that there are consequences to this.

Individual liberty

To understand that there are able to listen to others but can use their own ideas and design choices when making a product.

To accept that others ideas may not be the same as their own but are able to accept this.

Mutual Respect

To listen to and consider the ideas and opinions of others even if they differ from your own.

To be able to take turns during discussions to resolve difficulties or make decisions.

To offer supportive comments in evaluations that will improve learning outcomes in a way that is objective but sensitive to the listener.

Tolerance

To tolerate ideas from others that are different to their own.

To understand that many great design ideas originate from the cultures.

Assessment

This year we have continued a skills-based termly assessment system linked to our Design Technology curriculum. All teachers assess pupils against key objectives in Autumn, Spring and Summer. From work and projects completed, class discussions and careful questioning, teachers decide if pupils are working below/at/or above Age Related Expectations. The Subject Leader then collates the data to look for successes and areas to develop. This has implications for refining topics and purchasing new resources. An example of the Design Technology Objectives for Year 4 is provided below:

A Year 4 Designer:

- I can use ideas from other people when I am designing.
- I can produce a plan and explain it.
- I can evaluate and suggest improvements for my design.
- I can evaluate products for both their purpose/appearance.
- I can explain how I have improved my original design.
- I can present a product in an interesting way.

- I can measure accurately.
- I am determined and adapt my work when my original ideas don't work.
- I know how to be hygienic and safe when using food.

Assessment data from the last academic year:

Year 3 - Below ARE = 9% ARE = 82% Exceeding ARE = 9%

Year 4 - Below ARE = 13% ARE = 65% Exceeding ARE = 24%

Year 5 - Below ARE = 11% ARE = 75% Exceeding ARE = 13%

Year 6 - Below ARE = 6% ARE = 84% Exceeding ARE = 10%

Changes during the academic year

The curriculum for Design Technology this year has been reviewed and several changes have been made. Having firstly looked at coverage of the subject, I have made the decision to bring in new topics. Breaking the DT curriculum up into mechanisms, textiles, electricals, digital and structures, a new curriculum ensures that each area is covered at least twice during every pupils four years at FJS (with one topic occurring in LKS2 and another in UKS2). Following the introduction of the new layout via a staff meet delivered by myself, staff have already been proactive and enthusiastic to implement subject changes, with new units of work planned and delivered. As the next academic year progresses, we will hopefully see **all** new topics delivered throughout the year.

We have also revamped food technology units throughout school. Each year group now has a clear food technology unit to complete during the year. Eight brand new ovens have been purchased for school as well as new cooking equipment, which as been organised into sets, so each one can be assigned to one oven. This will allow pupils during their four years to experience and develop a love of cooking, an understanding of healthy eating and to learn new culinary skills.

Year group	Mechanisms	Textiles	Electricals	Digital	Structures	Food technology
Year 3	Pneumatics	Puppets			Shelters (Stone Age)	Crepes
Year 4	Cams		Torches	Timers		Pizzas
Year 5	Lego challenges	Phone cases			Bridges	Banana bread
Year 6			Controllable vehicles	CAD 3D modelling		Pasties and salad

Communication with Chesterfield High School has also been made to allow us to utilise resources and equipment for certain topics (e.g. CAD 3D modelling).

Pupil Voice/Book Scrutiny

Pupil voice feedback tells me that pupils enjoy their D&T lessons. There are a variety of projects in most classes. Children preferred to make their own products so they could take them home rather than working in a group to complete a task. Pupils also stated they would like to have more topics involving food technology (this will be implemented this year).

From scrutinising books, there is progress in the quality and quantity of work. Evaluations are more detailed (Year 3 mark out of five compared to Year 5/6 where there is clearer reflection on the success of their project - what went well/what would you change next time?).

Next steps

- Build link with CHS for specific topics.
- Review and complete new progression map to match new curriculum topics.
- Look to promote cooking more through a cooking club
- Lesson observations to see new topics in action

Photos

Year 3 - Structures (Stone Age structures)



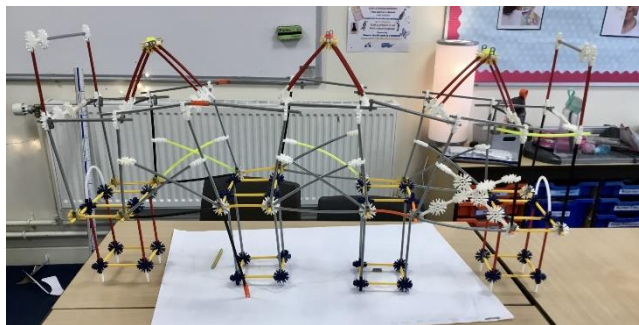
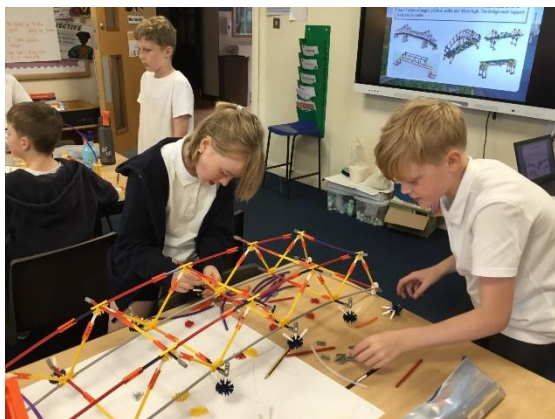
Year 4 - Food technology (Pizzas)



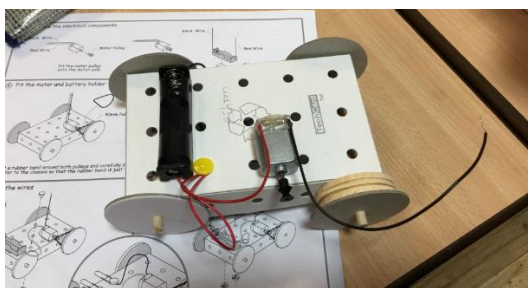
Year 5 - Textiles (Phone cases)



Year 5 - Structures (Bridges)



Year 6 - Electricals (Controllable vehicles)



Food technology in a maths lesson!

