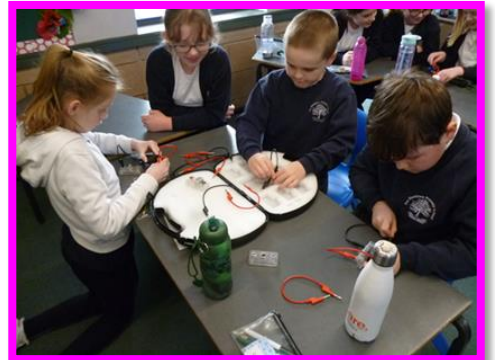


Design Technology at The Meadows



- ❖ 'I like building bridges with my Lego. I want to be an architect when I'm older.' Y1
- ❖ 'The making things – there's no restrictions on what you make.' Y3
- ❖ 'You get to have fun – just doing it and making stuff.' Y3
- ❖ 'I enjoy making things. I like getting all the materials and making it.' Y4
- ❖ 'It's fun – you can just go wild with it and use different materials!' Y6

An introduction to **Design Technology** at The Meadows

- ❖ **Intent: Why we do what we do**
- ❖ **Implementation: How we teach Design Technology at The Meadows**
- ❖ **Impact: How we will know if we have been successful**
- ❖ **Progression of skills within each strand of DT**
- ❖ **Hierarchy of DT Skills**
- ❖ Whole-school **long-term plan** for Design Technology
- ❖ A child's **learning journey** through Design Technology at The Meadows
- ❖ **Design Technology policy**

Introduction

Our Design and Technology vision at The Meadows Primary School is to develop the children's love and enthusiasm for the subject through providing them with exciting projects to complete each term that challenge them to become creative, imaginative and innovative thinkers.

They will design and make products that solve real life problems that are relevant to them and the World around them, each time being encouraged to create authentic and innovative products. Children will learn the important life skill of making decisions and learn to critically evaluate their products. These characteristics of learning and wealth of skills will help to prepare them for the future.



The children will be encouraged to challenge themselves and tackle each project with enthusiasm, increasing skills, knowledge and understanding and resilience. They will develop the important skills of communicating in various ways, learning from and working with others and develop the ability to apply their knowledge, skills and understanding gained in other subjects to help them complete each Design Technology project.

❖ Intent: **Why we do what we do**

Throughout their time at the Meadows Primary School the children will develop key life skills during their Design and Technology lessons including



being creative risk takers, developing a keen motivation and resilience in their projects and have the ability to critically evaluate and analyse their work. Our aim being to develop future employees who have strong leadership skill qualities with a vision that is both eco-aware and innovative.

By learning Design and Technology at the Meadows Primary School, we will be developing the children's emotional intelligence in addition to their diversity and cultural intelligence. The children will develop strong interpersonal communication skills by engaging in lessons with their peers and display a growth mindset.

Design and Technology lessons at the Meadows will be full inclusive, allowing children of every ability to succeed and reach their full potential.



❖ Implementation: **How we teach Design Technology at The Meadows**

GENERAL INTRODUCTION:

At the Meadows, Design and Technology is taught creatively and with a clear purpose. The children are always encouraged to create with a purpose in mind e.g. design and make a dragon puppet when once completed, they will have the opportunity to retell a story using their puppets to the EYFS children 1:1.

EYFS

The Design and Technology knowledge and skills begins its foundation in EYFS and then develops progressively throughout the school so that the children have built all the necessary skills to complete each project set through the year groups.



In EYFS, Design and Technology lies within the Physical Development and Expressive Arts and Design areas. Underpinning these areas are the Characteristics of Effective Learning which are fundamental to developing designers of the future. They will be encouraged to play and explore, be active learners and create and think critically within all sessions.

They will develop a curiosity about how things work and ask questions to develop their understanding. Opportunities for the children to disassemble and reassemble will promote their understanding of this e.g. moving parts.

During Child Initiated Play, the children will be encouraged to use their imagination with the construction equipment to create simple representations of things that they see in their everyday World e.g. a moving car, a rocket. After they have made a representation, they will be asked to talk about their design, including what they like and what they would improve if they made it again, thus developing a critical thinking and evaluative mind from an early age. They will then be encouraged to adapt and change their design in order to further improve.



They will explore a range of different materials and techniques e.g. weaving with paper/ribbon and develop ideas for decoration e.g. sequins, feathers, googly eyes etc.

The children will begin to use simple tools safely and with increasing control to cut and shape materials e.g. scissors to cut paper/card, knife to chop fruit.

By developing all of these things in EYFS, we are providing the children with the skills and knowledge to thrive in Design and Technology throughout the school.

KEY STAGE 1

In Key Stage 1, we have a two-year rolling programme for Design and Technology due to mixed age classes. Every year, the children have the opportunity to complete one Design and Technology project each term, ensuring that there is a Food and Nutrition strand each year. Other Design and Technology strands taught include: textiles, structures and mechanisms.



Within each Design and Technology project, the children will have the opportunity to participate in investigative and evaluative activities where they will look at, draw and disassemble existing products and evaluate their effectiveness. They will have the opportunity to take part in some focussed tasks – these are the tasks which will help the children to build upon previously learnt skills and develop all the necessary new skills that they will need in order to design and make their product in the final stages. At the end of each project, the children will have the opportunity to design, make and then evaluate their end product. This progressive approach enables all children to succeed in their Design and Technology lessons.



Science, Maths, Art and Literacy skills will underpin their learning and children will always be called upon to draw upon their knowledge, learning and skills developed in these subjects to support their work in Design and Technology e.g. their measuring skills developed in their Maths lessons. By encouraging the children to consider what other skills they can use

in their Design and Technology lessons, they will develop a deeper understanding of the subject. This cross-curricular approach is a powerful tool for the children and helps them make connections in the real world.

KEY STAGE 2

In Key Stage 2, we run a two-year rolling programme for Design and Technology due to mixed age classes for both Lower and Upper Key Stage 2, with Year 6 projects running independently alongside these. As in Key Stage 1, the children have the opportunity to complete one Design and Technology project each term, ensuring that there is a Food and Nutrition strand each year. Other Design and Technology strands taught include: textiles, structures and mechanisms and CAD (Computer Aided Design) is now brought in to support the children's designs.



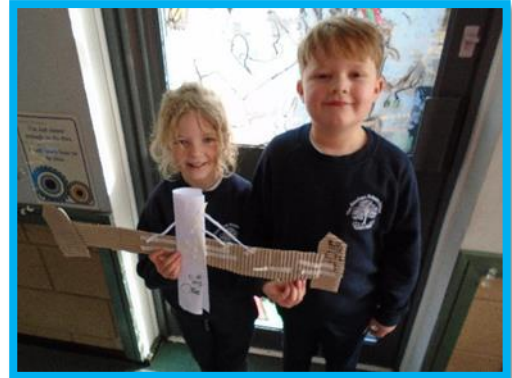
Again, children will have the opportunity to make something, for someone, for some purpose each term working their way progressively through the investigative and evaluative activities, participate in some focused tasks where they will develop and refine the skills needed to successfully complete the design and make stage. After each project undertaken, the children will have the opportunity to evaluate the success of their end project.



Cross-curricular links will continue to be developed and children will be called upon to use valuable skills learnt in other subject areas to complete their Design and Technology project.

❖ Impact: **How we will know if we have been successful**

In all of their Design and Technology lessons, the children will demonstrate their progressing knowledge, understanding and development of skills in order to create a high quality product that they demonstrate a growing ability to analyse and evaluate in order to improve on their next Design and Technology project.



The children will not be afraid to 'think outside the box' or to make mistakes but rather see this as a positive experience from which they learn and improve. They will grow in confidence each lesson and year group so that they become very confident in their Design



and Technology lessons, and willing to share the positives and the negatives of their design and product. Consequently, the children will develop their problem solving ideas by creating prototypes and improving upon these to create their final product.

How can you help your child at home?

The one to one support you can offer your child in supporting their Design and Technology is invaluable and don't under estimate the importance of play and the valuable conversation you can have with your child!

Allow your child to use their construction equipment at home (at all ages!) and consider what they will make, why they will make it and how they will make it. Construction equipment can include Duplo, wooden blocks, Lego, Sticklebricks, Meccano or just everyday objects like recycled boxes, tubs and card.

Once completed ask your children these key questions:

- Tell me about what you've made...
- How does it work?
- What do you like about it?
- If you made it again, what would you change?

Don't forget to tell them about your experiences of making as a child or roll up your sleeves and make alongside them!

Allow your child to help you prepare food (under your watchful eye at all times and only allowing them to do tasks which are appropriate of their age/skills) including:

Talk about the importance of wiping down work tops and washing hands,

Peel and chop fruit and vegetables using a child friendly knife – bananas are a nice soft fruit to begin with,

Get them to butter bread and make a simple jam or ham sandwich and cut into squares,

Chat about healthy and non-healthy foods in your house,

Get them to mix things in a bowl like cakes and even allow them to crack open an egg into a dish etc.

Some lovely ideas from Twinkl of things you can do at home with your child including useful videos:

<https://www.twinkl.co.uk/blog/back-to-school-ten-free-design-technology-activities-and-ideas-for-parents>

STEM is a brilliant organisation and has some wonderful ideas and resources for you to use or just gain ideas from:

EYFS

<https://www.stem.org.uk/resources/elibrary/resource/468111/learning-projects-eyfs>

Years 1 and 2

<https://www.stem.org.uk/resources/elibrary/resource/468113/learning-projects-year-1-and-2>

Years 3 and 4

<https://www.stem.org.uk/resources/elibrary/resource/468114/learning-projects-year-3-and-4>

Years 5 and 6

<https://www.stem.org.uk/resources/elibrary/resource/468115/learning-projects-year-5-and-6>

Also, if you go onto Pinterest and type in 'STEM DT Ideas for Home' it gives you a huge variety of really fun activities for the whole family using everyday resources you'd have already in the house like pegs, lollypop sticks etc.

KS1 pupils at home

KS2 pupils at home