# Design and Technology
# Intent, Implementation, Impact

"Whatever you do, work at it with all your heart" Colossians 3:23

**Intent**

*'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'*

*(National Curriculum 2014 – Appendix A)*

At Huby, our Design and technology scheme aims to inspire our children to be innovative and creative thinkers. We want our pupils to develop the confidence to take risks, through drafting design concepts, modelling, and testing and to be reflective learners who evaluate their work and that of their peers. We encourage our pupils to persevere when faced with a new challenge and to support one another, sharing their own experiences and success (or otherwise) stories, to help their peers to continue with their project.

During our planned DT days, parent helpers, governors and locally skilled members of the community are invited into Huby School to work with our pupils and offer them further support and encouragement. This also facilitates the passing-down of skills from one generation to the next in many cases, which is invaluable for our young learners.

Through our scheme, we aim to build an awareness of the impact of design and technology on our lives and encourage pupils to become resourceful and enterprising young people, who will have the skills to take forward to future design projects, in secondary school and beyond.

We aim to prepare children for the KS3 design and technology curriculum to enable them to transfer confidently and successfully.

The Design and technology scheme of work supports pupils to meet the National curriculum end of Key stage 2 attainment targets.

**Implementation**

EYFS
At Huby, children in EYFS will learn different joining techniques to enhance their work (eg flange joint). They will learn to plan their creations and be able to talk about them, for example the processes they have used; reflecting on how they can make them better next time. Our children will have access to a wide range of resources including junk modelling, Sellotape, glue, paints, pipe cleaners and will learn to use all these resources independently. Our EYFS children will have the opportunity to learn about different artists and sculptures (eg Jason Taylor).

Reception will be able to:
Return to and build on their previous learning, refining ideas and developing their ability to represent them. (EAD)
Create collaboratively, sharing ideas, resources and skills. (EAD)
Compose and decompose shapes so that children recognise a shape can have other shapes within it. (M)

In KS1 and KS2 Design and technology is taught using the 'Kapow' online scheme. We also follow guidance from the National Curriculum where Design and technology is organised into targets under four sub-headings, which Huby School have adopted as our Primary Strands:

- Design
- Make
- Evaluate
- Technical knowledge

Cooking and nutrition is given a particular focus in the National Curriculum therefore at Huby, we have made this one of the four key areas that our children revisit throughout their time in primary school. These include:

- Cooking and nutrition
- Mechanisms/Mechanical systems
- Structures
- Textiles

Our scheme is a spiral curriculum, with key areas revisited again and again with increasing complexity, allowing pupils to revisit and build on their previous learning.

Lessons at Huby School incorporate a range of teaching strategies from independent tasks, paired and group work, including practical hands-on, inventive tasks. The online Kapow scheme means that differentiated guidance is offered and CPD is available for teachers via the online tutorials, delivered by Design and technology experts. Short quizzes and knowledge catcher resources are also available from Kapow which can be used at the start

and/or end of each unit to help with assessment. Therefore, teachers feel supported to deliver lessons of a high standard to ensure pupil progression.

Whether taught on a weekly basis, through a DT day or during enrichment after school, Design and technology at Huby Primary aims to be a fun and creative subject which can be accessed and enjoyed by all children.

**Impact**

Through the enthusiasm, involvement and high-quality teaching of staff and helpers at Huby School, the expected impact of following our primary scheme of work in Design and technology is that children will:

- Understand the functional and aesthetic properties of a range of materials and resources.
- Understand how to use and combine tools to carry out different processes for shaping, decorating, and manufacturing products.
- Build and apply a repertoire of skills, knowledge and understanding to produce high quality, innovative outcomes.
- Understand and apply the principles of healthy eating, diets, and recipes, including key processes, food groups and cooking equipment.
- Self-evaluate and reflect on learning at different stages and identify areas to improve.
- Meet the end of key stage expectations outlined in the National curriculum for Design and technology.