Design Technology at Whitehouse Primary School

At Whitehouse Primary School, we aim to provide all children with a broad and balanced curriculum which prepares them for life beyond primary education. We encourage children to use their creativity and imagination, to design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

Design and Technology is an inspiring, rigorous and practical subject. It can be found in many of the objects children use each day and is a part of children's immediate experiences. Design and Technology encourages children to learn to think and intervene creatively to solve problems both as individuals and as members of a team.

At Whitehouse Primary, the Design and Technology curriculum combines skills, knowledge, concepts and values to enable children to tackle real problems. It can improve analysis, problem solving, practical capability and evaluation skills. We aim to, wherever possible, link work to other disciplines such as mathematics, science, engineering, computing and art. The children are encouraged to become innovators and risk-takers. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

Our curriculum for design and technology aims to ensure that all pupils:

- 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 repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- 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.

The DT Curriculum at Whitehouse Primary provides plenty of opportunities for the children to learn, apply and strengthen essential skills required in the designing, making and evaluating of an effective product for a given purpose.

It is also the aim of the DT Curriculum to ensure that the children are well-equipped with useful technical knowledge to support them in the design and making of their product. For example: Learning how to strengthen a structure to make it more stable, learning how to use mechanisms or electrical systems in their designs and learning how to use computer programming to control a product.

The school aims to develop the children's use and understanding of technical vocabulary associated with this subject. This is so that the children can articulate the skills that they have applied, the equipment that they have used and describe the material/s and features of the product that they have made.

In Early Years, the children develop essential basic skills in design and technology which prepares them for their transition into Year 1. This is by the teacher creating many opportunities for the children to carry out D&T related activities across all areas of learning.

By the end of Early Years, it is expected that the children will be able to:

- Construct with a purpose in mind.
- Use simple tools and techniques competently and appropriately.
- Build and construct with a wide range of objects, selecting appropriate resources and adapting their work when necessary.
- Select the tools and techniques they need to shape, assemble and join materials they are using.

From Year 1 upwards, the children will engage in DT projects which will involve the children exploring, researching, designing, making, technical knowledge/skills and evaluating.

EXPLORING

The children will explore products linked to their project. They will do this by:

- Taking the product apart and looking at the material/s used to make it.
- Looking at the different features of the product.
- Establishing how the product is constructed.
- Questioning how effective it is in its purpose.
- Discussing what could be done to improve this product.
- Producing a list of key vocabulary linked to this product.

RESEARCHING

The children will carry out research regarding the product that they are going to make so that they can use this research to support the design of their product.

DESIGNING

The children will draw/sketch their design and annotate this with information about their design such as, what features they have included in their design.

During this lesson the children will also answer questions such as:

- What materials will I need?
- What tools will I need?
- What technical skills will I need to practise before making the product? (Some of these may have been previously taught skills which need refreshing or be completely new)

TECHNICAL KNOWLEDGE / SKILL

The children engage in a practical activity of practising technical knowledge or skill that they will be required to use when making their product. This may be a new skill or a skill previously practised but that required more practise.

MAKING

The children make their product.

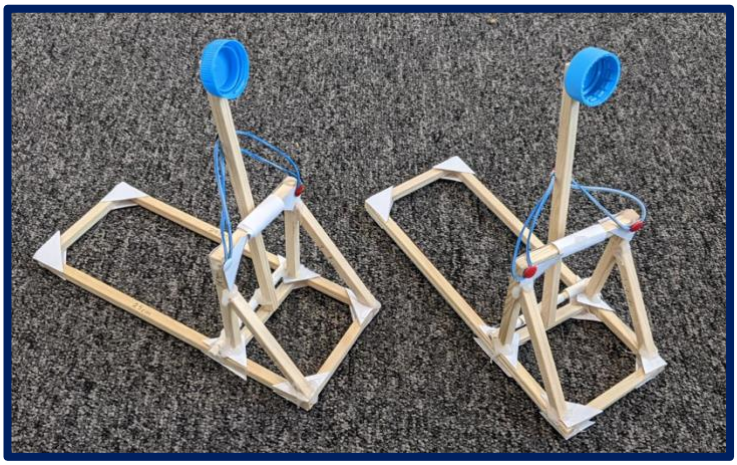
EVALUATING

The children will not only evaluate the effectiveness of their product but also the skills that they applied.

Furthermore, children through school are taught cooking and nutrition in the curriculum and we provide a curriculum which enables children to make healthy eating choices. We believe teaching pupils to cook is an important part of promoting a whole school approach to health and wellbeing and attainment. We have a dedicated, well resourced kitchen area that the children enjoy using as part of their cooking experiences, where they are taught safety aspects of cooking and to develop independence, cooking simple nutritious foods.

Impact

Each DT project ends with all children creating and evaluating a final product; these products are a fantastic way for children to demonstrate the skills they have learnt. Throughout the school, children are given the opportunity to consolidate their skills by creating their final product independently. Each lesson builds on the previous and children's skills are improved upon throughout each topic. It is also clear to see the progression of skills throughout the school through the quality of products each year group creates. Subject and school leaders monitor the impact of our curriculum provision through completing regular monitoring, that includes listening to the voice of our children.



You can't use up creativity. The more you use, the more you have." -- Maya Angelou