Wylye Valley
Primary School

Love Care Respect

To aspire to being outstanding in everything we do, by always aiming higher.

"Let your light shine in all you say and do."

Matthew 5:16

Design and Technology at Wylye Valley Primary School

Intent:

At Wylye Valley Primary School, we aim to provide all children with a broad and balanced curriculum that is relevant in our rapidly changing world and which prepares them for life beyond primary education.

Design and Technology is an inspiring, rigorous and practical subject. Examples of design and technology processes and outcomes can be found in many of the objects children use each day and is a part of their immediate experiences. We aim, wherever possible, to link work to other disciplines such as mathematics, science, engineering, computing and art.

We encourage our children to become problem solvers who can work creatively both as individuals or as part of a team on a shared project. We believe that high-quality DT lessons will inspire children to think independently and innovatively. In addition, it will develop creative, procedural and technical understanding.

Our DT curriculum provides children with opportunities to research, represent their ideas, explore and investigate, develop their ideas, make a product and evaluate their work. The children are also given opportunities to reflect upon and evaluate past and present design technology, its uses and its effectiveness and are encouraged to become innovators and risk-takers. Children will be exposed to a wide range of media including textiles, food and woodwork; through this, children will develop their skills, vocabulary and resilience.

Implementation:

The EYFS and National Curriculum form the foundation of our DT skills-based curriculum. In Design Technology children are given opportunities to solve problems and develop their learning independently.

Within their planning time, teachers have access to a range of Kapow units of work on which to base their lessons. Our Design and Technology Curriculum is planned to demonstrate progression year on year, giving pupils the skills and knowledge and vocabulary that they need to move forward in their learning, alongside opportunities to apply their knowledge to different situations.

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children design and create products that consider function and purpose and which are relevant to a range of sectors (for example, the home, school, leisure, culture, enterprise, industry and the wider environment).

When designing and making, the children are taught to:

Design:
• use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.
• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer-aided design.

Make:
• select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing, as well as chopping and slicing) accurately.
• select from and use a wider range of materials, ingredients and components, including construction materials, textiles and ingredients, according to their functional properties, aesthetic qualities and, where appropriate, taste.

Evaluate:
• investigate and analyse a range of existing products.
• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
• understand how key events and individuals in design and technology have helped shape the world.

Technical knowledge:
• apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
• understand and use mechanical systems in their products.
• understand and use electrical systems in their products.
• apply their understanding of computing to program, monitor and control their products
• understand some of the ways that food can be processed and the effect of different cooking practices (including baking and grilling).

Cooking and Nutrition:

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the

great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life. Pupils should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Key stage 2

- understand and apply the principles of a healthy and varied diet
- prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed

Key skills and key knowledge for DT have been mapped across the school to ensure progression between year groups. The context for the children's work in DT is also well considered and children learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study.

Impact:

If children are keeping up with the curriculum, they are deemed to be making good or better progress.

We ensure the children:

- 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 to design and make high-quality prototypes and products for a wide range of users, evaluate and test their ideas and products and the work of others.
- understand and apply the principles of nutrition and learn how to cook.

Children will design and make a range of products. A good quality finish will be expected in all design and activities made appropriate to the age and ability of the child. We measure the impact of our curriculum through the following methods:

- reflection on standards achieved against the planned outcomes;
- pupil discussions about their learning, which includes discussion of their thoughts, ideas, processing and evaluations of work.

As designers, children will develop skills and attributes they can use beyond school and into adulthood.