

# Cleeve Prior CE Primary Design Technology Curriculum offer

Nurturing

Flourishing

Growing



*“It’s not just about ideas, it’s about making ideas happen.”*

Scott Belsk

Our vision is to provide a safe, caring and nurturing environment, where everyone is given opportunities to learn, discover and grow in our changing world. We will live out our Christian values of Respect, Hope, Love, Forgiveness, Trust and Honesty and strive to guide our community into leading fruitful lives, learning from Jesus' teachings, to love themselves and one another in order to flourish.

‘Teach children how they should live, and they will remember it all their life.’ Proverbs 22:6

Cleeve Prior CE Primary School – Learning and growing together in God's family.



We believe our vision, along with its associated values, set the tone for our entire ethos as a school community. We want to give our children the best start, be led by the example of Jesus' life and for all our children to know that they can achieve anything if they put their mind to it. Our role as a school is to help them to become citizens of the future, to lead and inspire others.

Our school promotes an exciting, Christian community in order that all of our pupils will:

- ◆ become independent life-long learners with an enjoyment of learning.
- ◆ achieve their full potential in all areas.
- ◆ behave well and grow in self-esteem.
- ◆ make progress emotionally, morally, physically, socially and spiritually.
- ◆ have respect for others' views, be tolerant of differences and value one another equally so they are able to live and work harmoniously in our multi-cultural society.





## Design Technology Intent

Products of Design and Technology is all around us. From the dresses that we wear to the laptops and computers that we use, they have been carefully designed, made and evaluated.

Our aim is to ensure that the children have the opportunity to develop an understanding of technological processes, products, how they are made and their uses. We want to provide these opportunities so that children can develop a curiosity and interest in the designed and made world whilst also providing for them, opportunities to develop skills and techniques using a range of tools and materials safely.

We have carefully designed our curriculum to ensure that children are taught a variety of different skills within the areas of Design and Technology from the National Curriculum.

These include, mechanisms and mechanical systems, food, electrical systems, textiles and structures. The skills we teach in each year group is designed to build upon the children's previous learning. Our learning journey is based upon the following principles, design, make and evaluate.



## Design Technology Implementation

We teach DT weekly for one hour, for one half term and alternate it with Art and Design. This means each class has three Design Technology topics each year.

As we have mixed-aged classes, we teach on a three-year rolling plan to avoid duplication and ensure all children are exposed to as wide a range skills and opportunities as possible during their time at Cleeve Prior CE Primary School.

We use Kapow to base our planning on but adapt their planning to meet the needs of our mixed-aged classes as appropriate.

We have identified the key disciplinary knowledge (skills) End Points we expect our children to achieve at the end of KS1, lower KS2 and upper KS2 that we share with our children.



**I am a KS1 design technician when I can...**

**Cleeve Prior CE PRIMARY SCHOOL**

**Design:**  
To be able to design products that have a clear purpose and an intended user. To effectively make and attempt to refine the design as work progresses and with some adult support, model designs using software.

**Make:**  
To be able to cut, measure and mark out materials safely using tools provided using a range of cutting and shaping techniques (tearing, cutting, folding, curling). To be able to join textiles using running stitch and decorate textiles are created using a number of techniques (such as dyeing, adding sequins, or printing).

**Evaluate:**  
To explore objects and designs to identify likes and dislikes of the designs and to suggest improvements. To explore how products have been created.

**Technical Knowledge:**  
To use materials to practice drilling, screwing, gluing and nailing materials to make and strengthen products and to create products using levers, wheels and winding mechanisms.

**Technical Knowledge:**  
To demonstrate a range of joining techniques (such as gluing, hinges or combining materials to strengthen).

**Cooking and Nutrition:**  
To be able to cut, peel or grate ingredients safely and hygienically and measure or weigh using measuring cups or electronic scales. To be able to assemble or cook ingredients.



**I am a LKS2 design technician when I can...**

**Cleeve Prior CE PRIMARY SCHOOL**

**Design:**  
To design with purpose by identifying opportunities to design and to make products by working efficiently (such as by carefully selecting materials). To be able to refine work and techniques as work progresses, continually evaluating the product design. Beginning to be able to use software to design and represent product designs.

**Make:**  
To cut, measure and mark out materials to the nearest millimetre and safely by selecting appropriate tools. To independently attempt to select appropriate joining techniques to join textiles with appropriate stitching and select the most appropriate techniques to decorate textiles.

**Evaluate:**  
To identify some of the great designers in all of the areas of study (including pioneers in horticultural techniques) to generate ideas for designs. Improve upon existing designs, giving reasons for choices. To attempt to disassemble products to gain a deeper understanding how they work.

**Technical Knowledge:**  
To be able to create series and parallel circuits and control and monitor models using software designed for this purpose. To choose suitable techniques to construct products or to repair items. Are able to strengthen materials using suitable techniques.

**Technical Knowledge:**  
To use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product (such as levers, winding mechanisms, pulleys and gears).

**Cooking and Nutrition:**  
To be able to prepare ingredients hygienically using appropriate utensils. To measure ingredients to the nearest gram accurately. Is able to follow a recipe and assemble or cook ingredients (controlling the temperature of the oven or hob, if cooking).



**I am a UKS2 design technician when I can...**

**Cleeve Prior CE PRIMARY SCHOOL**

**Design:**  
To be able to design, using a variety of approaches, and make products through stages of prototypes, making continual refinements and combine elements of design from a range of inspirational designers throughout history, giving reasons for choices. To be able to design with the user in mind, motivated by the service a product will offer (rather than simply for profit).

**Make:**  
To be able to cut materials with precision and refine the finish with appropriate tools. To show an understanding of the qualities of materials to choose appropriate tools to cut and shape and create objects (such as a cushion) that employ a seam allowance and is able to join textiles with a combination of stitching techniques.

**Evaluate:**  
To attempt to create innovative designs that improve upon existing products and can evaluate the design of products so as to suggest improvements to the user experience.

**Technical Knowledge:**  
To create circuits using electronics kits that employ a number of components and is beginning to write code to control and monitor models or products. To develop a range of practical skills to create products (such as cutting, drilling and screwing, nailing, gluing, filing and sanding).

**Technical Knowledge:**  
To attempt to use innovative combinations of electronics (or computing) and mechanics in product designs and is able to use prototypes, cross-sectional diagrams and computer aided designs to represent designs.

**Cooking and Nutrition:**  
To understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms). To be able to measure accurately and can generally calculate ratios of ingredients to scale up or down from a recipe and can demonstrate a range of baking and cooking techniques. Create and refine recipes, including ingredients, methods, cooking times and temperatures.

# Design Technology Impact

- We use a variety of assessment methods to check what our children have learned. These include (but are not restricted to):
- Knowledge catchers
- Super summaries
- Quizzes and mini tests
- Pupil voice activities
- Activities in learning logs