

DT at Eversley

"Anyone who has never made a mistake has never tried anything new."
Albert Einstein.



Creativity is allowing yourself to make mistakes. Design is knowing which ones to keep. Scott Adams

At Eversley Primary School, our aim is to provide pupils with practical opportunities to develop their creativity and imagination in a variety of contexts. Using examples of past and present designs, children have opportunities to experiment by researching, replicating and building upon ideas to design products which are fit for a purpose. Children are encouraged to make choices by selecting appropriate materials and equipment to use safely and accurately. Continuous reflections are made throughout the process to ensure improvements are made and adapted to ensure a high-quality finish final product which is effective and functional. Our aim is for all children to leave Eversley with the knowledge, skills and passion to apply themselves to progress and achieve their full potential in any aspect of their field of work or day to day life.

During EYFS at Eversley

Children are taught to recognise that a range of technology is used in places such as home and schools.

They will learn to select and use technology for a particular purpose and represent their own ideas, thoughts and feelings.

They will be able to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

During Key Stage 1 at Eversley

Through creative and practical activities, pupils will be taught the knowledge, understanding and skills needed to engage in a process of designing and making. Units of work follow the cycle of; *Investigate, Design, Make and Evaluate*. Pupils will be taught to make structures, use textiles and create healthy food.

Investigate

- Investigate and explore existing products. Discuss how and why they are made as they are. Be taught and explore the skills and technical knowledge required to create their own design.

Design

- design purposeful, functional products based on design criteria
- generate, develop, model and communicate their ideas through talking, drawing, templates and mockups

Make

- select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]
 - select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate

- evaluate their own and others' products against the original design idea
 - Decide if and how the product could be improved

During Key Stage 2 at Eversley

In KS2 children will build on the skills taught in KS1 using the same cycle of; Investigate, Design, Make and Evaluate. Units of work will deepen pupils' knowledge of; structures, textile design, healthy cooking and food origin and develop their skills in mechanisms and electrical systems to create movement.

Investigate

- investigate and analyse a range of existing products
- understand how key events and individuals in design and technology have helped shape the world
- generate, develop, model and communicate their ideas on how products work through discussion, annotated sketches, cross-sectional and exploded diagrams,

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
 - use prototypes, pattern pieces and computer-aided design
- select from and use a wider range of tools and equipment to perform practical tasks accurately
- select from and use a wider range of materials and components, according to their functional properties and aesthetic qualities
 - apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
 - apply their understanding of computing to program, monitor and control their products

Evaluate

- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work

<p>Planning</p> <ul style="list-style-type: none"> • The school's curriculum map shows the units to be covered each term • Use the school's medium term plan for each unit of work • Plans are annotated and adapted to show how less able and SEND and those new to English will access the content. • The most able children are planned for so that they can deepen knowledge and skills. • Lesson are planned to encourage children to research, design, make and evaluate their products. • Knowledge and Skills will be explicitly taught and opportunities will be planned for children to apply them independently. 	<p>Teaching</p> <ul style="list-style-type: none"> • Flexible groupings are used during lessons e.g. ability and mixed ability groups, paired work, guided and independent work and whole class work. • Opportunities are provided for children to learn and develop new subject specific vocabulary and skills (these are also explicitly taught) • A range of skills should be used to explore how products and designs are improved • Relevant subject specific vocabulary must be explicitly taught, evident in the classroom and used in discussion. • DT lessons are to be taught in alternation with art over a term.
<p>Marking and feedback</p> <p>Work should be marked according to the school marking policy by using:</p> <ul style="list-style-type: none"> • Peer- and self-assessment • Oral feedback • Written feedback 	
<p>Assessment</p> <p>Formative:</p> <ul style="list-style-type: none"> • AFL should be used within each lesson to establish if skills have been understood and applied. • Evaluation of end product against the design brief <p>EYFS:</p> <ul style="list-style-type: none"> • Teachers and key workers make observations regarding the pupils' development in this subject. 	<p>Resourcing and display</p> <ul style="list-style-type: none"> • Resources are stored in a central location for use in DT lessons • Teachers are encouraged to add resources based on feedback from the children and the tools they have selected.
<p>Monitoring</p> <p>Monitoring is undertaken by the subject leader and SLT during the school year. This will include:</p> <ul style="list-style-type: none"> • learning walks during DT lessons. • scrutiny of DT books. • conferencing with pupils and discussions about their learning. 	