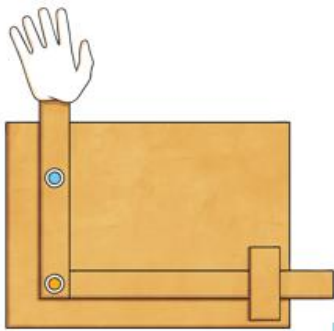




Castilion Primary School Design and Technology



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At Castilion Primary School our values are fundamental expressions of what we think and believe.

- **Equality** - ensuring that every individual child has an equal opportunity to make the most of their lives and talents.
- **Dignity** - being respected for the children that they are and what they believe in.
- **Respect** - treating other children the way they would like to be treated, and acknowledging the thoughts and opinions of other children.

At Castilion Primary School our mission supports wellbeing, participation, relationships and self-esteem.

- **Engage** - children have better relationships.
- **Enthuse** - children feel safe and are healthy and happy.
- **Empower** - children become active and involved in school life and the wider world

Rationale

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. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

(National Curriculum, programme of study, 2013)

Aims

The current National Curriculum states that the aims of Design and technology are to make sure 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

At Castilion Primary School, we teach Design and technology through creating opportunities for pupils to explore many different aspects of designing, creating and evaluating, helping pupils and teachers understand the ways Design and technology connects us with our past, helps us embrace the present, and empowers us to shape our future. By exploring why Design and technology is relevant to all our lives, we aim to make certain that pupils feel entitled to develop their creativity, and understand their place in the world as creative, confident beings.

By developing our new design and technology scheme, through the use of Plan Bee, we aim to:

- deliver a rich and exciting visual, design and technology curriculum which meets the needs of the current National Curriculum for design and technology.
- set a bench mark for excellence in design and technology teaching, so schools can be proud of their creative curriculum, and pupils and teachers can enjoy the journey and outcomes.

Objectives

Learning

Children first encounter design and technology and design in the early years foundation stage (EYFS). This is through:

- 'Physical Development': handling and using equipment
- 'Communication and Language': discussing what they are doing, what they like etc.
- 'Expressive Art & Design': creating drawings and designs
- 'Understanding the World': ongoing observations are made in these areas to record and assess the development of particular skills

This helps them to work towards the early learning goals such as 'safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function'. High-quality practice in the early years stimulates children's interest and imagination in the materials and media they encounter and provides the necessary foundations for future learning.

In the National Curriculum, design and technology is a compulsory subject at Key Stage 1 and 2.

Teaching

Our emphasis is on a journey that allows teaching and learning to empower teachers and pupils to become confident, creative, decision makers. Teachers and pupils can grow and develop with our curriculum by using clear structures and access to resources which help teachers understand the WHY as well as the HOW. All classes will take a journey through design, make and evaluate. As well as expanding on their technical knowledge.

Design and technology focuses on different areas, these include:

- Cooking and Nutrition
- Structures
- Mechanical Systems
- Textiles
- Electrical Systems (KS2 only)

Our design and technology curriculum is alternated with the teaching of art. Therefore, each half term, all classes will develop their skills and knowledge at the same time, building on prior knowledge and skills and showing progression through the year groups. Our design and technology curriculum is skills and knowledge based, and pupils will learn a wide range of skills, developing understanding and showing clear progression. More importantly, the knowledge and understanding pupils will build will go far beyond the technical and factual knowledge.

Assessment, recording and reporting (see *Assessment Policy*)

Assessment in design and technology is seen in its broadest sense and is not limited to measurement and testing. We advocate gentle, ongoing assessment based upon lots of conversation, to discover intention and understanding, as well as looking at outcomes of the journey and end result. This information is then recorded against the statements of attainment in line with other areas of the curriculum. At this school we appreciate that a vital aid to learning is for pupils to be actively involved in their own assessment.

Time Allocation

We plan that art in EYFS will be delivered in accordance with the guidelines set out in the statutory EYFS Development Matters and is linked with themes planned throughout the year. At Key Stage 1 and 2, we aim for pupils to access a design and technology lesson for at least an hour a week. This will not include any further transfer of skills in other subjects.

Planning

Each lesson starts a journey, building on prior knowledge, to support in all stages of creating a final product.

They follow format which promotes excellent teaching & learning:

- **Warm-up:** Introduction to today's work and recall on prior learning. This provides children time to 'think, pair, share' and discuss their ideas. Opportunities to retrieve prior learning are incorporated into each lesson.
- **Activity:** Pupils will then be introduced to a skill to practice and implement. This will be modelled and then pupils will have an opportunity to practise, e.g. different stitches.
- **Plenary/Evaluation:** The lessons will end with a reflection of their work and their classmates work. Children will have the opportunity to evaluate what they have created throughout the lesson and answer questions to help support this

Short term planning of individual lessons are available through Plan Bee however, any further adaptations is a matter for the class teacher. The Design and Technology Subject Leader is available to support with this and keeps a range of teacher's resources as a guide. When planning each unit of work, following Plan Bee, the teacher will identify which parts of the programme of study are to be the focus, the learning objectives for the unit, the learning tasks planned to achieve them, time allocated and any resources, visits or visitors needed. The work planned must be relevant to the needs of the pupils.

Design and technology also involves understanding and implementing safety in using tools and materials, a key life skill.

➤ **Safety**

A safe working environment and ways of working need to be encouraged from the earliest stage and safe practices should be understood by voluntary helpers. All areas must be under the direct vision of the teacher and there should be enough space for each child to work comfortably. Teachers should be aware of any physical limitations which a pupil may suffer (e.g. height, eyesight or hearing) and make suitable arrangements.

➤ **Working with food**

Cooking utensils and work areas should be kept meticulously clean. Children will be shown how to carefully use different utensils and be monitored whilst using these. Children should learn simple personal hygiene and food preparation rules.

➤ **Tools**

Tools that present a safety hazard such as a glue gun or craft knife need to be secured away from general tools. Children should be trained to use tools safely from an early age.

Cross curricular dimensions

Although the key skills learnt during design and technology lessons are specific to the learning intention and topic, these skills can be readily used across the curriculum in other subjects. Pupils will have opportunities to put these skills into practise and demonstrate how they can be transferrable.

By using the evaluation techniques at the end of each lesson, pupils will be able to continually develop their discussion, assessment and areas for improvement in other subjects. We want all pupils to be able to strive to achieve the best possible outcome they can.

Life Skills

Design and technology teaches children life skills, through decision making, learning the correct use of different tools and creating a finished product. It shows where other subjects, like maths, can be used to help to create a final product.

Monitoring and review

The subject leader and other relevant leaders where appropriate will ensure this policy is implemented consistently throughout the school. This is through rigorous monitoring such as discussions with teachers, pupils and parents/carers, monitoring pupils' books and reports, lesson observations, learning walks and monitoring teachers' planning.