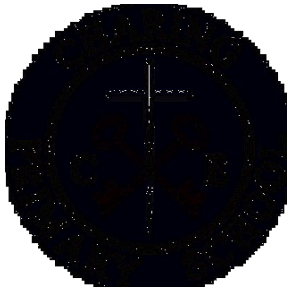

Design and Technology Intent

Our vision

Our inclusive school is a place of creative learning where all talents are developed, celebrated and enjoyed. We nurture all to be curious, passionate and resilient lifelong learners. As a community, we listen to, forgive and love one another so all can be confident in who they are. Inspired by Jesus we walk beside each individual in our family by understanding and responding to their unique needs. We have hope in all our children that they grow to be open, compassionate people of the world who stand up for what is right.

Compassion Friendship Forgiveness Resilience Hope

AQUILA
Diocese of Canterbury
Academies Trust

Curriculum intent

At Charing CEP School, it is our aim to offer children a high-quality and inclusive Design and Technology curriculum. As a school we use Kapow's scheme of work to support our Design and Technology lessons. Our aims are to fulfil the requirements of the National Curriculum for Design and Technology, provide a broad and balanced curriculum and ensure the progressive development of knowledge and skills. Our Design and Technology curriculum is design to encourage the children to develop skills and challenge their knowledge.

Through a range of creative and practical lessons, pupils are taught to knowledge, understanding and skills required to engage in the process of designing and making. Pupils work with a range of context through topic-based units which allowed for cross curricular links to be made.

We ensure that pupils learn how to take risks, becoming resourceful, innovative, innovative and capable citizens through evaluation of past and present design and technology and develop a critical understanding of its impact on daily life and the wider world. Pupils will participate successfully in an increasingly technological world using the language of design and technology.

The aims of teaching Design and Technology in our school are:

- Develop creative, technical and imaginative thinking in children and to develop confidence to participate successfully in an increasingly technological world.
- Enable children to talk about how things work and to develop their technical knowledge,
- Apply a growing body of knowledge, understanding and skills in order to design and make prototypes and products for a wide range of users,
- Encourage children to select appropriate tools and techniques when making a product, whilst following safe procedures,
- Develop an understanding of technological processes and products, their manufacture and their contribution to our society,
- Foster enjoyment, satisfaction and purpose in designing and making things,
- Critique, evaluate and test their ideas and products, and the work of others,
- Understand and apply the principles of nutrition and to learn how to cook,
- Understand how key events and individuals in design and technology have helped shape the world.

Implementation

At Charing CEP School our Design and technology curriculum is based on the Kapow scheme which has been adapted to meet the needs of the pupils at Charing. The units that have been chosen allow pupils to meet the requirement of the National Curriculum.

Through a variety of creative and practical lessons, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The Design and Technology curriculum outlines three stages of the design process: Design, Make and evaluate. At tach stage of the design process pupils are encouraged to consider technical knowledge which encompasses the contextual, historical, and technical understanding required for each strand.

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 comes under the Design and Technology curriculum. This is its own section which focuses on the principles, skills and techniques in food.

Design and Technology lessons at Charing incorporate a range of different activities. These include, independent work, paired and group work, practical lessons. This ensure that lessons are engaging to all pupils. Lessons are assessable to all children and opportunities are always given to those who's knowledge can be stretched.

Key skills and key knowledge for Design and Technology have been mapped across the school to ensure progression between year groups. The context for the children's work in Design and Technology 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. Design and technology lessons are also taught as a block so that children's learning is focused throughout each unit of work.

Long Term Overview:
Subject: DT

	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 1			Structures: Constructing a windmill		Textiles: Puppets	
Year 2		Mechanism: Fairground Wheel		Structures: Baby Bear's Chair	Mechanism: Moving Monster	
Year 3	Structures: Animal structures		Cooking and nutrition: Eating seasonally			Textiles:
Year 4				Mechanical systems: Making a slingshot car		
Year 5				Structures: Bird Feeders		Cooking and nutrition: Developing a recipe
Year 6	Structures: Playgrounds			Textiles: Waistcoats		