

DESIGN AND TECHNOLOGY POLICY

INTRODUCTION

At Aldingbourne Primary School we are passionate about providing all children with the opportunities to engage in design and technology. This document outlines our aims in providing an inspiring, creative and practical design and technology curriculum to all children which sparks their imagination and equips children with the tools and skills to design, make and evaluate products. The curriculum expectations and entitlement for all children are outlined as well as the topics for each Key Stage. This policy also summarises teaching methods and resources used to captivate the children's interest and allow them to acquire the knowledge to solve problems and draw upon disciplines from other subject areas. Finally, our methods in assessing the children's knowledge and progress is explored and how we enable children to gain the skills and techniques to become resourceful, innovative, enterprising and capable citizens.

AIMS

We aim to deliver the design and technology curriculum in an engaging manner, accessible to all children, of all learning styles, whilst building upon prior learning and making art fun.

Our further aims marry that of the National Curriculum. To ensure that all 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 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.

CURRICULUM EXPECTATIONS AND ENTITLEMENT

At Aldingbourne School all children experience a broad and balanced design and technology curriculum that takes into account all abilities, learning styles and emotional and intellectual development. Design and technology is taught as part of a topic, alongside other curriculum subjects in the infants, and in junior rotation alongside the topic in the juniors. Each topic has a design and technology project that is designed to enable children to think of solutions in a variety of context. Long term planning is accompanied by medium term planning as well as daily planning for each design and technology session. All daily plans are designed to equip the children with the knowledge and confidence to apply their understanding of matter, skills and processes for a specific project.

Early Years

In Early Years:

- children safely use and explore a variety of materials, tools and techniques
- children experiment with the form and function of different materials
- children understand the similarities and difference in materials and discuss their use
- children represent their ideas through design and technology

Key Stage 1

During Key Stage 1:

- children design projects and discuss and develop their ideas
- children use a range of tools and equipment
- children have the opportunity to select from a wide range of materials
- children evaluate their ideas and existing products
- children explore the use of mechanisms and explore how to make structures they have built stronger and more stable
- children understand where food comes from and the basic principles of a healthy varied diet

Our topics which cover the Key Stage 1 Design and Technology National Curriculum are:

Autumn

Houses and Homes
Food Glorious Food

Spring

Extreme Explorers
Hot and Cold

Summer

By The Seaside
Get Moving

Key Stage 2

During Key Stage 2:

- children design innovative, functional and appealing products and develop their design techniques using research to inform their design
- children use an even wider range of tools and equipment with accuracy
- children have the opportunity to select from a wide range of materials according to their properties
- children evaluate and analyse their ideas and existing products
- children understand how key events and individuals in design and technology have helped shape the world
- children understand how to use mechanisms and can make structures they have built stronger and more stable
- children can use electrical systems in their products and apply their understand of computing to program and control products

- children prepare and cook a variety of dishes understanding the journey the food.

Our topics which cover the Key Stage 2 Art and Design National Curriculum are:

Lower Key Stage 2

Autumn

The Romans
Water

Spring

Communication
The Greeks

Summer

The Vikings
Prehistoric Past

Upper Key Stage 2

Autumn

The Tudors
The Victorians

Spring

Amazing Americas
Europe

Summer

Sensational Sussex
Britain Since the 1930s

TEACHING METHODS AND RESOURCES

As a school, we pride ourselves on ensuring the teaching of Design and Technology is creative, fun, exciting and accessible to all learners. We achieve this in the following way:

- children experience teacher in role when an inventor comes to visit them to explain about their life and their work. For example, Johannes Gutenberg visits Year 3 and 4 during our Communication topic and teaches the children about the printing press
- children have a design and technology project in each topic from sewing to wood work
- children have opportunities to work with a variety of materials including wood, clay, construction material and sewing materials
- in Key Stage 1 and Foundation Stage, alongside classroom based activities, the children also have the opportunity to engage in child initiated design and technology activities in the Ezone and Whaling Area including different construction
- a range of teaching styles are adopted to allow the children to produce their own design and technology work. Whether it is modelling for the children; teaching them specific techniques and skills or allowing the children to explore their own repertoire to create the desired outcome.
- children have computing lessons that focus on programming and controlling a variety of products
- we have a well-stocked art cupboard and practical room with a variety of materials and tools. We also have the opportunity to purchase equipment and resources if needed for design and technology.

ASSESSMENT

At Aldingbourne School, formative assessment is an integral part of our daily practise. It is used to inform planning, to facilitate differentiation and to ensure that the children have the foundations to successfully build upon their prior design and technology skills and techniques. At the end of the academic year, based on the children's art work and their ability, a judgement is given by the class teacher which states if a child is working towards, within or met the design and technology curriculum. This is reported to parents in the child's end of year report.