



Design and Technology Policy

Intent:

The Purpose of Design and Technology

This policy outlines the teaching and learning of design and technology. All children will have the opportunity to undertake design and technology throughout their time at Kniveton Church of England Primary School. This will be so structured as to give a sound basis for further work.

Aims

Design and technology is a practical subject.

- We aim to prepare pupils to participate in tomorrow's rapidly changing technologies.
- To provide opportunities for all the children to design and make quality products.
- To provide children with the opportunity to explore food and cooking techniques along with healthy eating and environmental issues within food production.
- To develop design and making skills, knowledge and understanding to the best of each child's ability; using and selecting a range of tool, materials and components.
- To become creative problem solvers as individuals and members of a team.
- To be able to use computing in conjunction with the Designing and Making process.
- To develop an ability to criticise constructively and evaluate their own products and those of others.
- To help the children develop an understanding of the ways people in the past and present have used design to meet their needs. To reflect on and evaluate such techniques, its uses and effects.
- To prepare the children for living in a multi-cultural society by teaching consideration for other culture which will be both important and beneficial.

Objectives

To achieve our aims we ensure that the planned activities our children undertake are challenging, motivating, relevant and enjoyable. We give children confidence in their work by providing continual support and encouragement. The children are extended in their work in a way which develops their expertise. The children are provided with the very best resources possible, while constantly reviewing this provision in the light of curriculum changes, development and budget constraints.

Implementation

Curriculum and school organisation

We use a skills based cross-curricular approach to teaching and learning using objectives taken from the National Curriculum. We teach DT skills discretely and through our Curriculum themes, ensuring all children access all areas of the Design Technology Curriculum.

In Early Years Foundation Stage, Design and Technology is an integral part of topic work, relating aspects of the children's work to the objectives set out in the Early Learning Goals, and Arts and Design. To facilitate our objectives different teaching styles and methods are used as appropriate. These include small group and individual work.

To meet the requirements of the National Curriculum it is essential that each teacher carry out the following Design Technology activities with our two year topic cycle;

- ✓ Mechanisms
- ✓ Textiles
- ✓ Food
- ✓ Structures

Design and technology curriculum planning

Design and technology is a foundation subject in the National Curriculum. Our school uses both the National Curriculum as the basis for its curriculum planning in design and technology.

Our medium-term plans, which we have adopted from the National Curriculum, give details of each unit of work for each term. They identify learning objectives and outcomes for each unit, and ensure an appropriate balance and distribution of work across each term.

Here is the link for the National Curriculum document:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/239041/PRIMARY_national_curriculum_-_Design_and_technology.pdf

Personal, social and health education (PSHE) and citizenship

Design and technology contributes to the teaching of personal, social and health education and citizenship. We encourage the children to develop a sense of responsibility in following safe procedures when making things. They also learn about health and healthy diets. Their work encourages them to be responsible and to set targets to meet deadlines, and they also learn through their understanding of personal hygiene, how to prevent disease from spreading when working with food.

Spiritual, moral, social and cultural development

The teaching of design and technology offers opportunities to support the social development of our children through the way we expect them to work with each other in lessons. Our groupings allow children to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and co-operative work across a range of activities and experiences in design and technology, the children develop respect for the abilities of other children and a better understanding of themselves. They also develop a respect for the environment, for their own health and safety and for that of others. They develop their cultural awareness and understanding, and they learn to appreciate the value of differences and similarities. A variety of experiences teaches them to appreciate that all people are equally important, and that the needs of individuals are not the same as the needs of groups.

Impact

Assessment

Assessing a child's performance is a continuous process carried out over the full seven years of Primary school and our assessing methods include the following as appropriate:-

1. Looking at a child's recorded work i.e. model, photographs, written work.
2. Individual discussion.
3. Listening to the children's ideas as they discuss between themselves.
4. Group discussions in both planning and reporting back sessions.
5. Observing the children's skills in Design and Technology.

At the end of every unit of work, each teacher will complete a unit assessment sheet which will be returned to the subject coordinator. Skills developed during each unit will be highlighted on the skills progression sheet provided by the subject coordinator to ensure progression and coverage.

Recording

It is essential that the type of recording be matched to the type of Design and Technology activity as well as to the needs and abilities of the child. A variety of recording methods are therefore used. These include pictures, structured worksheets, sketches, diagrams, flow charts, model making, written explanations, photographs and school displays.

Resources

Our school has a wide range of resources to support the teaching of design and technology across the school. Basic resources are available in classrooms, with the more specialised equipment being kept in the stock cupboard.

Safety in Design and Technology

The safety of the children is the responsibility of the class teacher. The children are made aware of the safe use and correct procedure involved when using tools and equipment in a learning environment and how to follow proper procedures for food safety and hygiene. The children are made aware of the need to be careful and to understand that their actions can affect others.

The children build up a range of skills when using equipment to reduce unnecessary risk. Junior hacksaws and hand drills are used only by years 5 and 6 under direct supervision of the teacher. All staff, including helpers, are made aware of food safety procedures when working with food to minimise any risks. The children wear protective clothing if necessary.

Monitoring and review

The monitoring of the standards of children's work and of the quality of teaching in design and technology is the responsibility of the design and technology subject leader.

Role of the subject leader:

The role of the subject leader is to provide professional leadership and management to secure good teaching, effective use of resources and improved standards of learning and achievement for all pupils in Design and Technology.

- The subject leader provides leadership and direction for the subject and ensures that it is managed and organised to meet the aims and objectives of the school and the subject.
- The subject leader has responsibility for securing good standards of teaching and learning in their subject as well as playing a major role in the development of school policy and practice.
- Throughout their work, a subject leader ensures that practices improve the quality of education provided, meet the needs and aspirations of all pupils, and raise standards of achievement in the school.
- The subject leader identifies needs in their own subject, including any necessary resources for the year ahead.

Design Technology Long term Overview 2022-2024

Class 1

Rotation 1	(2022-2023)	Rotation 2	(2023-2024)
Autumn	<ul style="list-style-type: none">• Mechanisms: Making a moving story book (Y1)• Pouches (Yr2)	Autumn	<ul style="list-style-type: none">• Food: Fruit and vegetables (Y1)• Textiles: Puppets (Y1)
Spring	<ul style="list-style-type: none">• Food: A balanced diet (Y2)	Spring	<ul style="list-style-type: none">• Mechanisms: Making a moving Easter animal (Yr2)• Structures: Baby Bears Chair (Y2)
Summer	<ul style="list-style-type: none">• Structures: Constructing a windmill (Y1)	Summer	<ul style="list-style-type: none">• Mechanisms: Wheels and axels (Y1)• Mechanisms: Fairground Wheel (Yr2)

Class 2

Rotation 1	(2022-2023)	Rotation 2	(2023-2024)
Autumn	Adapting a recipe	Autumn	Cross stitch
Spring	Pneumatic toys	Spring	Electric posters
Summer	Making Castles	Summer	Eating seasonally

Class 3

Rotation 1	(2022-2023)	Rotation 2	(2023-2024)
Autumn	Textiles- waistcoats	Autumn	Electrical systems- doodlers
Spring	Mechanical systems- pop up book	Spring	Structure- playgrounds
Summer	Food: what could be healthier?	Summer	Digital world- navigating the world

