

TANKERSLEY C of E (A) PRIMARY SCHOOL

DESIGN & TECHNOLOGY POLICY



“A love of learning in a Christian environment”

We aim high and have self-belief

We have community spirit

We are enterprising

We have enquiring minds

We are respectful

Updated September 2020

Next review September 2022

Policy for Design and Technology

Intent

Design and Technology is an inspiring, rigorous and practical subject through which pupils use their creativity and imagination to design and make products that solve real and relevant problems within a variety of contexts. Pupils consider their own and others' needs, wants and values, they take risks, become resourceful, innovative, enterprising and capable citizens. They acquire a broad range of subject knowledge and draw on a range of disciplines including mathematics, science, engineering, computing and art. Through evaluating past and present design and technology, pupils develop a critical understanding of its impact on both 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.

As part of the school's drive to ensure all subjects are given equal status and to provide a broad and balanced curriculum the school has a 3 year subject overview as part of the Subject in the spotlight. This involves each subject lead writing an action plan for this subject area and monitoring their subject area through work scrutiny, developing a portfolio of subject progression and celebration in the subject as well as dedicated time for whole school display.

Aims and Objectives

Through the teaching of Design and technology at Tankersley, our aims are that all pupils will:

- ✓ Develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technical 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.

Implementation

In the Early Years Foundation Stage, the appropriate skills, knowledge and understanding for Design and technology are developed through a wide range of both planned and self-initiated opportunities for learning. Within the prime area 'Physical Development', through developing control and coordination regarding both their gross and fine motor skills, pupils learn how to handle a range of implements. Pupils also learn about the effects of a healthy life style on their bodies including the importance of making healthy choices in relation to

food. Through the specific area 'Mathematics', pupils learn about shape, space and measures so that they can talk about size, weight, capacity, position and direction. They explore the characteristics of everyday objects and shapes using mathematical language to describe them. In the specific area 'Understanding the World', pupils observe the world around them, find out about places, learn about cause effect, and the different types of technology that exist and what they are useful for. Further skills are developed through the specific area 'Expressive Arts and Design' whereby pupils are encouraged to experiment with, find out the properties of, modify and manipulate media and materials, use their imaginations in their creations and develop both curious and questioning disposition.

In KS1 & KS2, pupils undertake three Design and technology topics each year, which are linked where possible to other areas of the curriculum. These topics cover the required range of designing, making, evaluating and technical knowledge specified in the new curriculum, with all topics based on, or adapted from the QCA units. The following topics are taught in the specified Year Groups:

- ✓ Year 1: Victorian Homes (QCA 1D – Homes)
Growing (QCA 1C – Eat more fruit and vegetables)
Animal Groups (QCA 1A – Moving pictures)
- ✓ Year 2: Festivals and Celebrations (QCA 2B – Puppets)
Marvellous Medicine (QCA 2C – Winding up)
An Island Home (QCA 2A – Vehicles)
- ✓ Year 3: Metal Man (QCA 3C – Moving Monsters)
Groovy Greeks (QCA 3D – Photograph frames)
Come to Cornwall (QCA 3A – Sandwich snacks)
- ✓ Year 4: Tudors (QCA 4A – Money containers)
Ancient Egypt (QCA 4E – Lighting it up)
Vikings (QCA 4B – Storybooks)
- ✓ Year 5: Elizabeth I (QCA 5C – Moving toys)
Mining (QCA 5A – Musical instruments)
Mayans (QCA 5D – Biscuits)
- ✓ Year 6: Romans (QCA 6D – Controllable vehicles)
The Stuarts (QCA 6B – Slippers)
WW2 (QCA 6A – Shelters)

In addition to this, pupils undertake three 'Cooking and Nutrition' mini-topics each year which are linked to the topic area being studied during the given term . The following mini-topics are taught in the specified Year Groups:

- ✓ Year 1: Our Wonderful World (Sandwiches and cakes for Bob's picnic)
Castles (pastries)
Pirates (Pickled vegetables)
- ✓ Year 2: Jungle/Animal Habitats (Tortillas)

- Festivals and Celebrations (Pumpkin Soup)
 - Fire of London (A range of cooked meats)/Gingerbread men
- ✓ Year 3:
 - Metal Man (Different types of bread)
 - Groovy Greeks (Tzatziki)
 - Come to Cornwall (Cornish pasties)
- ✓ Year 4:
 - Tudors (tarts)
 - Ancient Egypt (make fruit salad)
 - Vikings (Meat & vegetable stew)
- ✓ Year 5:
 - Elizabeth I (Pancakes)
 - Mining (Sandwiches)
 - Mayans (Chocolate)
- ✓ Year 6:
 - Romans (Use herbs & spices to flavour Italian dishes, and Pizzas)
 - The Stuarts (Fruit salad, including exotic fruits)
 - WW2 (Milk based desserts)

Cross-Curricular Links

Examples of links with the whole curriculum include:

- ✓ English:
 - Speaking and Listening: Discussing stages of work and presenting.
 - Reading: Research and following instructions.
 - Writing: Questionnaires, planning and evaluation.
- ✓ Maths:
 - Measuring, calculating, estimating, 2D and 3D shapes and pattern.
- ✓ Computing:
 - Research and using software in the designing and making process.
- ✓ Science:
 - Healthy diet, hygiene and materials and their qualities.
- ✓ History:
 - Past developments in technology and their application.
- ✓ Geography:
 - Technological developments and applications in other countries.
- ✓ R.E., P.H.S.E. & Citizenship, S.E.A.L:
 - Responsibility, working with others, appreciation of the skills of others and improving people's lives through technology. Safety issues and the conservation of materials.
- ✓ Art and Design:
 - Close links especially in textiles and mouldable materials. Also, drawing skills, focus on finished appearance, and development of skills in using equipment common to both subjects, for example, scissors.
- ✓ Music:
 - Musical instruments.
- ✓ P.E:
 - Healthy lifestyles including hygiene and making appropriate food choices.

Resources

Equipment such as tools, kits and consumable resources are located in either classrooms or shared resource areas. All cooking based resources are located in the storeroom next to the P.E. store in the Hall. Many resources, particularly for junk modelling, are brought in from home by pupils.

Oxford Primary Art books provide useful pictures of items such as furniture and jewellery from different times and places.

Useful videos for KS2 topics, particularly those relating to materials and products, are located in Class 6's stock cupboard.

Impact, Assessment, Recording and Reporting

The whole design and technology process (including designing, making, evaluating and technical knowledge) underpins the assessment of pupils and not just the end result. Pupils' learning is assessed at the end of each QCA based Unit using the process of a 'best fit' model, and for 'Cooking and Nutrition' pupils' learning is assessed at the end of each academic year. Staff keep their own notes in order to update individual yearly records and report to parents/carers.

The pupils undertake regular self-assessment of their learning during Units and this is extremely valuable to the pupils in helping them to identify both their own successes and areas for development.

Equal Opportunities

All pupils have access to the Design and technology curriculum regardless of gender or race. Opportunities are taken wherever possible to promote positive gender and racial images, for example, by learning about products designed and made by both genders and different cultures. The open-ended nature of Design and technology enables pupils of all abilities to participate at their own level and for particularly talented pupils to reach their full potential. If any child found access difficult, for example, due to a physical disability, advice would be sought from appropriate sources in order to overcome this.

Developing and Monitoring the Curriculum

The Design and technology curriculum is developed by the Maths/Science Curriculum Team in consultation with the Design and Technology Subject Leader. Both the monitoring of planning and the monitoring of pupils' work is undertaken by the Key Stage teams and the Design and Technology Subject Leader.

Health & Safety

Key Stage 1

With guidance and supervision from the teachers or other adults, pupils are expected to have a simple knowledge and understand of health and safety as consumers and when working with materials and components, including:

- ✓ Considering the hazards and risks in their activities
- ✓ Following simple instructions to control risks to themselves.

Key Stage 2

With guidance and supervision from the teacher or other adults, pupils' knowledge and understanding of health and safety issues as designers, makers and consumers should be further developed to include:

- ✓ Recognising hazards to themselves and to others in a range of products, activities and environments
- ✓ Assessing risks to themselves and others
- ✓ Taking action to control these risks.

Food safety

The following guidelines will be adhered to:

- ✓ There should be no long-term storage of food
- ✓ Food to be sent home should be kept in clean containers
- ✓ Aprons should be worn and long hair tied back
- ✓ Hands should be washed before handling food
- ✓ Pupils should not work at cooker unattended. They should be assisted or supervised when removing hot materials from the cooking area
- ✓ Work surfaces should be thoroughly cleaned and dried before and after food preparation.
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