RED OAKS
PRIMARY SCHOOL
Aspire Achieve Grow

Design and Technology Statement and Guidance

Aims

At Red Oaks the Design Technology curriculum provides our children with skills and knowledge that they can build upon throughout their lives in an everchanging world. Design Technology is an inspiring, rigorous and practical subject where critical, logical and creative thinking is valued.

Children are given design briefs for products that solve real and relevant problems within a variety of contexts that consider their own and others' needs, wants and values. They are supported through the designing, making, testing and evaluating process and are encouraged 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.

As part of the Design Technology curriculum children are taught the principles of nutrition, hygiene, seasonality and healthy eating that will provide them with the skills and confidence to feed themselves in later life.

Other linked documents:
Whole School Food guidance
Science Statement and Guidance
PSHE Policy

Curriculum Design

The Red Oaks' Design Technology guidance seeks to:

- Ensure that children are provided with a broad and balanced DT curriculum that is taught following a progression, which develops knowledge and skills which build on previous learning.
- Ensure that DT is taught through a cross curricular approach that is relevant to their everyday life in an increasingly technological world.
- Enable children to develop creative, technical and practical expertise that they can build on and use in everyday life.
- Ensure that children develop an awareness of work of designers and inventors through research and are able to develop their critical analysis skills.
- Ensure that children are able to apply skills and knowledge they develop to designing and making high quality prototypes and products for a wide range of users.
- Ensure that children are able to critique, evaluate and test their idea in a helpful and supportive way.
- Increase children's knowledge of where food comes from, food production, manufacturing, distribution and marketing.
- Increase the children's understanding of the principles of nutrition and apply them to designing meals.
- Develop children's awareness of different foods eaten as parts of cultural celebrations and foods eaten through history.

- To develop children's awareness of seasonal and locally produces food.
- Ensure that children are able to develop skills to prepare and cook simple recipes.
- Ensure that children develop awareness of how to use a variety of tools and equipment safely and with increasing skill.
- Ensure that Health and Safety is taught as part of the Design Technology Curriculum.

Teaching and Learning Design Technology:

Early Years Foundation Stage:

Design Technology is taught in a language rich environment in the Foundation Stage where exploration through play, active learning creativity and critical thinking are at the heart of the children's learning.
During play and adult led activities children are encouraged to be creative, explore properties of materials and resources, developing joining skills and using their imagination as part of Expressive Arts and Design (EAD).
They develop gross and fine motor skills practise and develop physical skills eg. Using scissors and other one-handed tools and equipment as part of Physical Development (PD). These skills will all contribute to supporting the children's practical making skills in DT as they move through school.
Children are encouraged to develop their Understanding of the World (UtW) explore a wide range of materials through sensory play, cooking and outdoor experiences in the early years and are encouraged to talk about what they notice, make comparisons and explore how various items work. They find out the ways in which foods are used as part of celebrations and where food comes from.

Key Stage 1 and 2: Design Technology is taught using a cross-curricular approach which provides children with a range of contexts for them to learn the knowledge, skills and understanding needed to design, make and evaluate their own products that are readily available and the work of inventors.

The areas of DT the children will explore in KS1:

- Mechanisms
- Textiles
- Structures
- Food

The areas of DT the children will explore in KS2:

- Mechanisms
- Structures
- Electrical Systems
- Textures
- Food

Inclusion

In Design and Technology teaching at Red Oaks, staff are aware of children's individual needs and how to best differentiate teaching and learning to enable access for all. This is done through adapting teaching to suit a variety of learning styles, often using a multi-sensory approach. Teachers consider classroom organisation and management strategies to ensure optimal access for all learners, including those with physical, sensory and/or learning needs. Teachers have access to specialist support for advice on strategies, target setting and assessment. All disabled pupils are included on the Red Oaks' Vulnerable Learner Database, and their progress is systematically recorded and monitored. Red Oaks is a Dyslexia Friendly School and all teachers are aware of the Dyslexia Friendly Schools guidelines. The school has also achieved the Inclusion Quality Mark.

The Role of the Subject Leader

The Design Technology subject leader is responsible for the implementation of Design Technology policy across the school.

Their role is to:

- Offer help and support to all members of staff with Design Technology.
- Promote Design Technology within the school and the wider community.
- Maintain resources and advise staff on the use of equipment and resources.
- Monitor Design technology planning and teaching.
- Monitor the children's progression in Design Technology by looking at examples of work of different abilities.
- Keep up-to-date with new developments and communicate information developments with colleagues.
- Lead staff training on new initiatives.
- Attend appropriate in-service training.
- Keep parents and governors informed about Design Technology.

The Role of the Class Teacher

Individual teachers will be responsible for ensuring that the pupils in their classes have opportunities for studying Design Technology and using their knowledge, skills and understanding of Design Technology as part of Enquiry. They will plan and deliver the requirements of the National Curriculum for DT to the best of their ability. We set high expectations for our pupils and provide opportunities for all to achieve, including boys and girls, pupils with educational special needs, pupils with disabilities, pupils from all social and cultural backgrounds and those from diverse linguistic backgrounds. The class teacher's role is a vital role to develop the progression in learning and understanding and create effective learning environments. They class teacher will motivate children as learners using a range of teaching approaches and techniques.

Learning Resources

Design Technology resources are stored centrally in a locked cupboard and the cookery resources in a cupboard in the Music Room. All resources should be returned to the appropriate cupboard after they have been used. An audit of resources will take place annually and purchases made when necessary and when funds are available.

Health and Safety

The school is aware of the health and safety issues involved in the children's use of Design Technology equipment. We will promote a safe working environment for the children by demonstrating the correct use of equipment and reinforcing this regularly. Please also refer to the Health and Safety and whole school food policy for more guidance.

Assessment, Intervention, Data Collection and Analysis Assessment and Record Keeping

Teachers regularly assess progress through observations and evidence. The children's work in Design Technology is assessed by making informal judgements that are observed during lessons. This assessment process informs future learning and teachers identify children who are in the High Achievers 20% and ways their learning can be extended and the 20% Low Achievers in DT and ways in which they can be supported through interventions.

DT Curriculum links

Within the DT curriculum healthy eating, DT and food safety and an understanding of where our food comes from, will be taught. Where possible this will be linked to other curriculum area for example;

- Art – observational drawing, designing and developing overlapping skills eg. Sewing, joining
- English – instructions, reports, evaluations, recipes, speaking and listening *
- Maths – problem solving, weights and measures
- PE – healthy eating and exercise
- Science - investigating how things work, properties of materials, electrical systems, mechanisms, healthy lifestyles, growing food and sources of materials available for use
- RE – the rich diversity of other cultures and times
- Geography – physical geography/climate as a reason for designs, where food comes from, sustainability
- History – how people used to eat, designs for a range of purposes through history, inventors from the past

Opportunities to support and extend the Curriculum will be made through:

- Local initiatives
- Visitors linked to Design Technology
- Competitions and Activities promoting healthy eating/ DT related
- Ideas and links for activities and useful websites on Red Oaks Website
- Gardening space available to all age groups
- Links with Abbey Park and other trust schools- cooking opportunities, developing DT skill
- Ideas to try at home and links to useful websites on school website

Health and Safety

Children are taught how to use tools and equipment in a progression as they move through the school and are taught safe techniques to transport equipment e.g. scissors or to hold knives to cut various foods. Children's risk assessments take place within classes when a new piece of equipment is used and there are school risk assessments which are used and updated regularly. It is part of our normal school procedure that the children will be reminded to wash their hands after using the toilet and before preparing food or eating. All staff and parents involved in preparation of food will be aware of food safety and hygiene issues and receive regular training.

Links with Home

We recognise the need to work closely with parents and the wider community. We will endeavour to keep parents informed of what we are teaching the children and why, as well as keeping them up to date with national and local health information and initiatives, working closely with the school nurse and other members of the Primary Care Trust.