

Design and Technology

At Holly Primary School, we believe that Design and Technology is significant in encouraging pupils to learn, think and intervene creatively and practically in order to solve problems both as individuals and as members of a team. Through the teachings of Design and Technology, children develop their technical understanding, making skills, learn about design and investigate their environment and the materials around them. It is hoped that children acquire the creativity and imagination to solve real and relevant problems through the use of Design and Technology and can draw on existing experiences and skills as well as developing and creating new ones.

Aims

As a whole school, our approach to teaching and learning is to provide children with a broad and balanced curriculum that allows them to achieve to their maximum potential in a safe, supportive and caring environment.

Through Design and Technology, we aim:

- To develop creative, technical and practical expertise.
- To provide children with necessary skills to perform everyday tasks confidently.
- To encourage imaginative thinking when designing.
- To develop their knowledge, understanding and skills in order to design and make products.
- To provide opportunities for children to expand their understanding of the world in a more creative and practical environment.
- To understand how to critique and evaluate their products and ideas.
- To develop their understanding of nutrition and how to cook.
- To provide opportunities where children can develop skills independently and as a team member.

Teaching and Learning

As throughout the curriculum, we use a variety of teaching styles in order to reach each child's ability and understanding. We want to provide children with practical and creative opportunities where they can draw from experience and also use imagination to build on their existing understanding.

'High quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.' (*The Primary National Curriculum, P180*)

The foundation Stage

In the foundation stage, we implement the use of Design and Technology through lots of painting, drawing, colouring and crafts. We support our children in developing these skills mainly through play and supported learning.

The foundation stage aims:

- To hold a pencil and other objects, such as a paint brush, comfortably in their most dominant hand.

- To develop their skills in using pencils on paper.
- To develop their understanding of colour through the use of paint and other materials.
- To create meaningful and relevant products with a specific design.
- To explore the world around them through imaginative play.

KS1

In Key Stage One, we implement the use of Design and Technology through a variety of creative and practical activities. We provide the skills to engage and interact with both familiar and unfamiliar tasks in an independent or group atmosphere. They are encouraged to explore a range of relevant contexts and use these experiences when creating and designing. We aim to support children with the opportunities for them to think independently.

KS1 aims:

- To design products for a purpose.
- To develop their imagination and creativity by improving a template design.
- Create, communicate and develop an idea or product to fit with a particular theme or curriculum subject.
- To use information, research and technology to develop ideas.
- To select and use a range of tools with a variety of purposes.
- To explore products that are available to them and how they can use them in a range of ways.
- To create using a design criteria.
- To produce structures and explore mechanisms.
- To discuss and communicate how they can improve their products and ideas.
- To understand where food comes from and what is determined as 'healthy'.
- To prepare dishes for a varied and healthy diet.

KS2

In Key Stage Two, we continue to implement the use of Design and Technology through a variety of creative and practical activities. It is our aim to build on children's existing knowledge, skills and understanding of Design and Technology. Children are encouraged to use new and innovative skills and ideas when creating products.

KS2 aims:

- To use research and information to develop and adapt their ideas and products.
- To design functional products fit for a purpose that are innovative, creative and appealing.
- To develop and communicate their ideas through a range of presentations.
- To select specific tools and equipment fit for their product from a wider selection.
- To have the knowledge of a range of materials and being able to select which would be the most appropriate for their design.
- To evaluate their designs against a criteria and consider the views of others.
- To develop their understanding of key individuals and events that have shaped the world.

- To apply their knowledge of how to reinforce their designs to make them stronger and more sustainable.
- To apply cross-curricular learning in their designs such as, programming, series circuits and gears.
- To understand how healthy food is grown, reared, caught and processed.
- To create savoury dishes suitable for a varied and healthy diet.

Safety

During class time, it is the responsibility of the class teacher to ensure the safety of their children. From The Foundation Stage through to Key Stage Two, 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.

Assessment

- Viewing a child's finished and recorded work such as, model, photographs or written work.
- Observing groups throughout the process of their design.
- Listening to children's ideas when discussed independently or between themselves.
- Class discussions when reporting back about their designs.
- Observing the child's skills, understanding and knowledge during a Design and Technology task.
- Assessing the progress of the child against a success criteria specific to the task set.