

# Curriculum policy: Design and Technology

# Design and Technology:

#### Design, Make, Evaluate, Improve



# Curriculum Intent

Through design and technology (D&T), we want our children to be engaged in projects that solve real and relevant problems within a variety of contexts. A problem should be the driving force behind any D&T unit.

We want our children to develop skills and knowledge in design, structures, mechanisms, electrical control, and a range of materials, including food.



## Curriculum Aims

#### We want children to be able to:

- Ask questions, discuss, communicate understanding, and revise their ideas
- Use specialist vocabulary
- Understand and clarify what design and technology is and the importance and value of studying the subject
- Evaluate their work and the work of others
- Use skills they have developed in subjects such as mathematics, science, computing, and art when designing and making a prototype or product
- Understand the importance of nutrition and learn how to cook
- Understand how to use a range of tools and resources safely



# Lesson structure

We want design and technology to be an enjoyable experience. We believe that children learn best when there is a clear structure and purpose for the learning.

Design and technology is taught using an enquiry approach. Each unit begins with an overarching question or problem to solve to hook and engage the children. There is also a clear unit outcome, providing a clear purpose for the learning.

Design and technology is a practical subject where children are encouraged to use their creativity and imagination to design and make products that solve real and relevant problems.

Each lesson begins with a clear learning objective. Success criteria are expressed as 'I can' statements which the children can self-assess as the lesson and unit progresses.

At the beginning of a practical lesson children will be made aware of any potential hazards. Teachers will emphasise the importance of handling equipment safely and correctly and how to work collaboratively in the classroom.

When any practical lessons involving food are planned, teachers will be mindful of food allergies.



# Planning and Resources

Each unit employs the same structure. Teachers begin by looking at the unit overview. This provides an at-a-glance overview of what will happen in the half termly unit. It offers practical advice regarding resourcing and teaching of the unit of work. It starts with the unit title and key enquiry question.

Most units end with children producing a finished product with a follow up evaluation.

It is essential that teachers read, digest, and fully understand how each lesson builds towards producing the finished product.



# Curriculum Implementation

We teach design and technology as an explicit subject from Years 1 to 6 using the Plan Bee scheme which covers all strands of the National Curriculum.

Children are taught three units of design and technology over the year. Each unit has six sessions, which start with a question or problem to solve and end with a finished product to evaluate.

All children work on the same core tasks. Those that grasp content and concepts quickly can go to work on the extensions within the task.

Design and technology skills are taught and developed within the 'Expressive Art and Design' in the Early Years. Learning experiences are a combination of adult led and child-initiated activities. Children will develop skills in using materials creatively, being imaginative and being expressive.



#### Assessment

Formative assessment opportunities are integrated throughout the units. Some are informal and depend on the use of talk, eavesdropping on children's discussions or through direct conversation with children to check their understanding and correct use of vocabulary.

Each unit is clearly evidenced with a title page which breaks down the 'I can' statements for each lesson. The 'I can' statements should be constantly referred to throughout the lesson.

By looking at which 'I can' statements the children have achieved, the children, teacher and subject leader can quickly determine who is working at age-related expectations and the knowledge, skills and concepts that require further attention.

At the end of Reception, the children are assessed against the Early Learning Goals in terms of Expressive Art and Design'. .



## Inclusion

We teach design and technology to all children, whatever their ability. Lessons are planned to meet the expectations of each year group, and the individual needs of the children. Those working towards expectations will work on tasks that are adapted to suit their needs. Questions posed within the sessions provide opportunities for all children to be able to contribute.



- Ensure that the statutory requirements of the national curriculum for design technology are met
- Ensure appropriate professional development opportunities are provided for all staff
- Monitor their subject to ensure consistency of approach
- Ensure regular and appropriate assessment of design technology takes place and have a clear overview of who is achieving age related expectations
- Ensure that children who are not making enough progress to achieve age related expectations have been identified, and appropriate interventions put in place to ensure they catch up
- Ensure appropriate resources are available
- Engage with outside agencies and online communities to keep up to date and become the expert in their chosen subject in the school

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