



Aston-on-Trent Primary School Intent, Implementation and Impact

Design & Technology



Intent

At Aston-on-Trent Primary our ambition for all the children revolves around our ethos and our values and visions. It is important that it is in line with the national strategies and to be useful to the children in their school life and general experience, now and into the future.

The intention of Design Technology is to support children in becoming confident, inventive and collaborative designers who are familiar with and conversant in the technology which meets the requirements of the EYFS and National Curriculum.

We aim to deliver high quality teaching and learning opportunities to enable children to produce functional and innovative products, individually and within a team.

Designing, making and evaluating are key areas children will explore in Design and

Technology through which they will develop their problem solving, resilience and perseverance – Beginning from their brilliant start in the Early Years Foundation Stage (EYFS) up until they leave for secondary school,

we intend to inspire children to have a love of Design Technology that will continue throughout their education and future lives. As a practical, hands-on subject, Design Technology links brilliantly with Mathematics, Science, Computing and Art and Design, providing children the opportunity to apply their knowledge of these subjects to purposeful and imaginative projects. Alongside these exciting projects explored within the classroom, we also plan a range of extracurricular activities to engage and inspire children beyond the classroom – Lego, Building Bricks after school club and Forest Schools opportunities.

Implementation

In the Early Years Foundation Stage (EYFS), children begin to develop important skills needed to become confident, imaginative and capable designers. Children will:

- Explore different media and materials: they will have the opportunity to explore and construct using a variety of different materials, tools and equipment with an intended purpose.
- Be imaginative: children will explore a range of products, materials and ideas through role play and exciting projects linked to English and Mathematics.
- Make links with 'The World' and 'Technology': children will explore how things work and be encouraged to develop their questioning skills, also building links with Computing and programming.

KS1 and KS2 children are given the opportunity to explore the following areas of Design Technology linked to: Structures, Mechanisms, Food and Nutrition, Textiles, Electrical Systems and The Digital World.

Children will build on existing skills from previous topics and learn new skills through a range of exciting and challenging activities.

Within each Design and Technology topic, children will participate in:

- Investigative Activities: children will explore how existing products work and how they have been made, linked to significant inventors.
- Focused Tasks: Children will have the opportunity to learn new skills and how to operate equipment safely

and accurately.

- Design Work: Children will generate their own ideas linked to Design Briefs and create working drawings to support their making activities.
- Making Activities: Children will apply their skills to create an innovative and functional product, adapting their designs when challenges arise.
- Evaluative Activities: Children will have the opportunity throughout their project to evaluate their own work and the work of others, drawing on new ideas and adapting their working to create the best product they possibly can. Within EYFS, KS1 and KS2, Children will also participate in at least one topic linked to Food and Nutrition.

Through this topic, children will:

- Understand how to maintain a healthy diet and healthy lifestyle.
- Develop knowledge of where food comes from and how it is made.
- Explore recipes and ingredients, adapting these to allow for creativity.
- Learn key cooking techniques and skills that can be applied to other recipes.
- Create and evaluate a healthy and delicious product.

All Design Technology lessons are designed to be inclusive, accessible and enjoyable for all and teaching staff will ensure additional support and resources are provided for children, when needed.

A range of theme days/weeks linked to Design and Technology topics.

- Whole School Competitions provided for children to participate in, linked to local Engineering Companies (E.g. Rolls Royce/Toyota).
- Outside providers delivering After School Clubs/workshops/assemblies in school.

School trips linked to Design Technology and Forest School opportunities.

Impact

Through Design Technology children are:

- Collaborative and responsive: children work with and alongside others well to design and make functional products, understanding the role of listening, evaluating and compromising.
- Confident, reflective, determined designers: children manage risks and create ambitious, high-quality products that they are proud of.
- Motivated, enthusiastic and eager to learn and enjoy the challenge.
- Knowledgeable and able to apply the skills, expertise and knowledge learned within an increasingly, technological world. Assessment of children's learning in Design Technology is an ongoing monitoring of children's understanding, knowledge and skills throughout lessons by the class teacher. This assessment is then used to inform the differentiation, support and challenge required by the children.

The vast majority of children will achieve age-related expectations in Design and Technology within all year groups.