

Design & Technology Curriculum



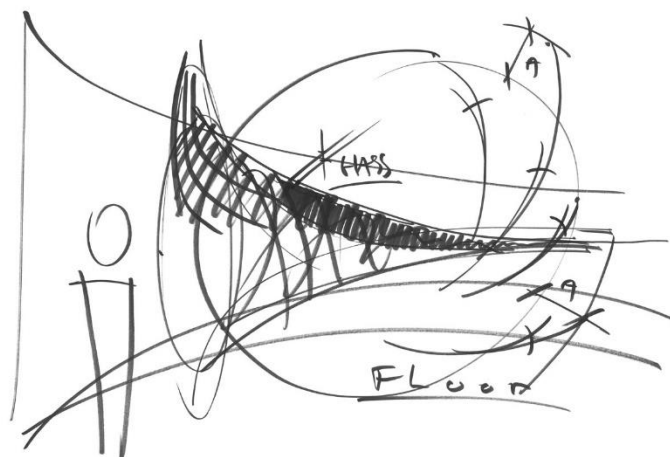
Subject Vision

At Woodthorpe we want to enable all pupils to become creative and confident learners so they are able to express their own thoughts, ideas and individuality.

Design & Technology offers the unique opportunity for children to innovate and become technical thinkers while promoting their ability to meet challenges and solve problems with resilience and increasing independence.

Subject Intent

At Woodthorpe, the Design & Technology curriculum allows children to create a range of structures, mechanisms, textiles, electrical systems and food products. Through a rigorous **design, make and evaluate** process, children will gather the critical and tactile skills to produce products that fulfil a set of criteria. As children progress through the key stages they will be inspired by engineers, designers, chefs and architects. All while developing the important and necessary technical skills to make their ideas come to life and enable them to meet the challenges of a rapidly changing world.



Subject Implementation

- At Woodthorpe, D&T is taught in every year group, once per week for three half-termly units of work throughout each academic year.
- Every child has a knowledge organiser in their sketchbook, prefacing each unit of work. These knowledge organisers allow children to refer back to prior learning, illustrate key techniques, highlight vocabulary and key design concepts required when working.
- Many DT units are based on planning from Plan Bee, including; Cooking and Nutrition, Mechanisms, Structures, Textiles and Electrical Systems
- Each child has a Design Technology book. Children may use this to research products, develop design ideas and initial sketches, and showcase learned skills, technical knowledge and vocabulary, final designs, and evaluations.
- We use a skills-based approach to teaching and Design Technology learning using objectives taken from the National Curriculum. We teach DT skills discretely, making relevant cross-curricular links, and ensure all children access all areas of the Design Technology Curriculum.
- Teaching of DT will also follow the cycle of RESEARCH > DESIGN > MAKE > EVALUATE >
- Beginning with the purpose of a product for a user, the children are encouraged to use the exploration of existing products to gain first-hand experience of existing approaches. We aim to promote creative problem solvers, both as individuals and part of a team and pupils develop their understanding of the ways in which people in the past and present have used design to meet their needs.
- Children design and make quality products using a range of tools, materials, and components, make connections with their learning across the curriculum including in maths, computing, science, and art and reflect on and evaluate techniques using subject-specific vocabulary.
- Teachers follow a clear progression of skills which ensure all pupils are challenged in line with their year group expectations and given the opportunity to build on their prior knowledge.
- Effective CPD and standardisation opportunities are available to staff to ensure high levels of confidence and knowledge are maintained.
- To support teaching, staff access a range of resources
- Our Foundation Subject Assessment Tracker allows us to use data to inform future practice.

EYFS

Through Expressive Arts children are encouraged to construct and create purposefully selecting tools and techniques needed to shape, assemble and join materials they are using. children learn through first-hand experiences which involve putting their ideas into practice to develop an awareness and understanding of the possibilities and limitations of different materials. Practitioners encourage children to explore, observe, solve problems, think critically, make decisions and talk about why they have made their decisions as they design and create. Children's natural creativity is fostered and opportunities for investigation, designing and making are offered daily within our provision, which enables children to learn a great deal about their world.

Subject Impact

The impact of our Design and Technology curriculum is in the development of our pupils being able to approach problems creatively and in a range of ways, applying their knowledge from across the curriculum areas independently. By providing a range of contexts and the necessary skills, we endeavour to support pupils in their future educational journey and in the understanding of the ever-developing world around them. The skills and attributes they develop will benefit them beyond school and into adulthood: the ability to use time efficiently, work with others productively, show initiative, independence, resilience and manage risks effectively will ensure well-rounded citizens who will make a difference in the wider world. Through the use of a termly assessment tracker and data analysis, we ensure that children who are achieving well, as well as those who are in need of additional support, are identified, and additional provision and strategies are planned in and discussed with class teachers. We expect the children to know more, remember more and understand more about Design and Technology.