

Kew Woods Primary School

Design Technology Policy



Intent Statement

Basic Curriculum Principles

1. Learning is a change to our long-term memory.
2. Our aims are to ensure that our pupils experience a wide breadth of study and have, by the end of each key stage, a long term memory of an ambitious body of knowledge.

Our high quality Design Technology Curriculum provides a breadth of learning opportunities that should engage and inspire pupils to develop an interest in Design Technology and over time allow them to build up and master a range of technical knowledge and practical skills. We follow the National Curriculum and cover the main disciplines of Design Technology – Structures, Mechanisms, Food, Textiles, Mechanical Systems and in Key Stage 2 only, Electrical Systems. The specific Purpose and Aims of Study will be that pupils learn and develop skills across each discipline. Our aim is not to overload pupils working memory but to allow the repetition of fundamental learning so that knowledge becomes embedded in their long term memory. By teaching key concepts it allows for repetition and retrieval. The key concepts are: **Master practical skills, Design make, evaluate and improve and Take inspiration from design throughout history**. Teaching these key concepts across each key stage will allow pupils to apply their knowledge and deepen their understanding. They will learn how to design and make high quality, working products and lessons will be creative, engaging and practical.

Implementation:

To strengthen our schema and support teachers we use the Design and Technology Association's Projects on a Page scheme of work. It supports the requirements of the National Curriculum and provides practical, technical and creative projects that engage pupils.

All Design Technology lessons are taught by a qualified teacher. Our Design Technology subject leader ensures that all teachers follow the Projects on a Page scheme. It supports specialist and non-specialist teachers by providing planning and technical guidance for creative projects that allow pupils to make functional, high quality products. The subject leader offers teachers further guidance and practical and technical support during the delivery of each project.

The Projects on a Page scheme allows pupils to learn how to design and make technically challenging products across the main disciplines of Design Technology. Pupils will focus on one discipline over a term and this will be revisited over time to allow them to develop a secure and deeper understanding of the key concepts. For example, within Mechanisms in Year 1 pupils will first learn to make *sliders and levers* then develop this skill in Year 2 to make wheels and axels, in Year 3 to make pneumatic systems, in Year 4 to make levers and

Kew Woods Primary School

Design Technology Policy



linkages, in Year 5 to make pulley mechanisms and finally in year 6 to make more complex CAMS systems. Within every discipline, each pupil will *Design, Make and Evaluate* a functional product, with a broad range of materials and components, with end users and purposes in mind. During some projects pupils will learn to use Computer Aided Design to improve the functionality of their products. Key design skills will be taught and developed and be woven through each project, building up a secure understanding of the design process.

One Design Technology project will take place each full term and each lesson will be taught for one afternoon every other week. Art will be taught in the intervening week. Interleaving the DT and art lessons will ensure pupils revisit content and allow them to retrieve previous learning and promote their long term learning. This will develop and embed technical skills and knowledge and the content of the projects will increase in complexity. Learning in all the projects will be linked by the fundamental design process of *Design, Make and Evaluate*.

In Early Years Foundation Stage Design Technology pupils will learn to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture and form and function. Design Technology will make an important contribution to the breadth of study across the EYFS framework.

Pupils' breadth of learning will be enhanced with lessons in the key skill: Take inspiration from design throughout history. Pupils will learn about famous designers and engineers and begin to understand their contribution to industry and pupils will learn about occupations in Design Technology. Pupils will have wider opportunities to enhance their Design Technology skills and knowledge over the year. The outside organisation, Sefton Active will deliver lessons about Healthy Lifestyles and Healthy Eating. Pupils will have the opportunity to take part in DT competitions with talks from visiting engineers to inspire and inform. It is planned that pupils will have the opportunity to work with visiting chefs to plan and make healthy meals and learn about foods from other cultures. Pupils enjoy a high quality Design Technology lesson when they visit Stanley High School on a Curriculum Day.

The Design Technology Subject Leader attends courses to keep updated on new initiatives and to link with other school and is in contact with the Design Technology department of local secondary schools to engage and organise future learning opportunities for our pupils and to seek out opportunities to enhance resources across the school.

Impact:

The short term progression pupils make will be evident at the end of each lesson as they will begin to make technically functioning prototypes and working designs. As lessons progress they will be able to improve their designs, become more adept at making the mechanisms and become more fluent when they discuss their ideas. Longer term will see the progression pupils make in Design Technology in the complexity, functionality, finished quality and

Kew Woods Primary School

Design Technology Policy



appearance of the products they make. There will be improved clarity, creativity and detail in technical plans and written evaluations. Pupils should become more confident and knowledgeable when talking about Design Technology. Creativity and free thinking should begin to flow through their work and pupils will begin to recognise the importance of Design Technology in the wider world and the opportunities it can deliver.

Teachers will continually assess pupils' knowledge and progress to ensure it is the long term memory and the Design Technology subject leader will also monitor progress and knowledge over time. We understand that knowledge precedes creativity and it is essential to grasp the basic aspects first. Progression through the projects is measured and assessed over 3 two year Milestones. Milestone 1 in Key Stage 1, Milestone 2 in Lower Key Stage 2 and Milestone 3 in Upper Key Stage 2. Thorough assessments are made against expectations at the end of each key stage. This may be evidence from lesson observations, learning walks, pupil interviews where we look at and discuss the products pupils have made.

Policy Implementation and Review

This policy was reviewed by SLT, shared with staff and approved by governors. It will be reviewed annually as per the policy review cycle.