



Our Vision for Design and Technology

Our vision for design and technology is to nurture our learners' love for design and cooking whilst developing curious, creative and innovative individuals. Through an engaging and progressive curriculum, we are committed to making meaningful curriculum links, developing key skills and equipping our pupils with the technical knowledge and vocabulary to confidently apply the principles of nutrition and navigate their way through design and cooking challenges.

Termly projects address different aspects of design and technology; pupils are given design briefs and the opportunity to solve real and relevant problems. Investigative and evaluative activities allow pupils time to research, explore and learn from a range of existing products, and to make discoveries about design and technology in the wider world. Technical knowledge, skills, and vocabulary are taught through focussed tasks and applied during designing, making and evaluating lessons. We recognise, however, that designing and making are not linear processes and by using an iterative design process, whereby ideas are communicated and clarified through action, further thinking and action, we aim to develop our pupils' reflectiveness, resilience and problem-solving abilities. By making links across the curriculum, including maths, science, computing, art, geography and history, pupils see how their design and technology abilities can be used across a variety of relevant and meaningful contexts.

The subject is taught progressively at Brookside with skills and knowledge taken from the EYFS statutory framework and National Curriculum. Projects are tailored to meet individual learning needs and pupils' progress is celebrated throughout.

In Reception, pupils are provided with many opportunities to develop their early skills safely, and hygienically, through play, tactile and sensory experiences. Pupils communicate orally when discussing existing products and their own original designs, thinking about users and purposes. They explore and model physically with a variety of materials, tools, equipment and techniques, experimenting with colour, design, texture, form and function. In addition to this, and in preparation for the transition into Year 1, pupils carry out a termly project which introduces them to early technical knowledge and skills in the areas of cooking and nutrition, textiles and

structures. Pupils make gingerbread biscuits; learn how to make their own hungry caterpillar puppets to use in a retelling of the story and design and make a simple model of a London landmark, inspired by the story, 'Katie Goes to London.' Pupils explore and make decisions about materials and methods of assembly.

Our Key Stage 1 projects revisit and build on pupils' early skills across the areas of cooking and nutrition, structures and mechanisms. During these projects, pupils are introduced to a wider range of materials, components, tools, equipment and ingredients. They learn to safely (and hygienically) perform practical tasks using design briefs and identify who and what their products are for. Designs are communicated and developed through discussion, drawings and ICT, where appropriate. Pupils also make templates and mock-ups to model and test their ideas. They are taught to measure, mark out, cut, shape, join and combine materials and components, and to develop their finishing techniques. When evaluating, pupils progress to talking in more detail about their own and others' designs. Pupils prepare for the transition into KS2 through their use of simple design criteria to develop ideas and by giving more detailed explanations of their choices.


Key Stage 2 termly projects are in the areas of cooking and nutrition, structures, mechanical and electrical components, computer control and textiles. When designing, pupils identify their intended users and progress to using market research to gather and analyse information about their needs, wants, preferences and values. They describe the purposes of their products and explain, using technical knowledge and vocabulary, how design features will function, and appeal to the intended users. Pupils move on to develop their own design criteria and refer to this throughout each stage of their projects. They generate and communicate realistic ideas through discussion, annotated and final product sketches, and use CAD software to make prototypes and pattern pieces to test, develop and modify ideas. Design decisions take accountability of resources, time constraints and costs. Pupils also consider the function and aesthetic qualities of a wider range of materials, components (including electrical components), tools, equipment and ingredients. They select and safely use those most suitable for the task, giving explanations for their choices.

By the end of Key Stage 2, pupils will have developed a wide range of skills, technical knowledge and vocabulary to draw on as they embark on more complex cooking and design briefs. They use design specifications to inform their innovative ideas which are generated and communicated in a variety of ways, including cross-sectional drawings and exploded diagrams. Pupils become more discerning cooks and designers. They demonstrate resourcefulness when performing multi-step, practical tasks.

At Brookside, it is our intention that our learners develop an awareness of design in the ever-changing world around them and an appreciation for the contribution that designers, past and present, make. By engaging in an iterative design process, we want our pupils to relish design challenges, make informed decisions, and competently select from and use a wide range of materials, components, ingredients, tools and equipment as they design, make and evaluate with their end users always in mind.

At Brookside, we pride ourselves on being an inclusive school where everyone is made to feel welcome. It is implicit to our curriculum design that all children, including those with SEND, have full access to the design and technology curriculum. We encourage children to be actively involved in their own learning, integrating what has been taught with their own experiences. We strive to provide a happy, supportive and inclusive environment in which all children become independent and confident learners and achievers in a continually changing world.

Elements of our D&T Curriculum									
Knowledge and Understanding Pupils develop knowledge and understanding that enables them to design, make and evaluate. Knowledge and understanding of a range of materials, tools/equipment, skills and techniques enables them to generate ideas for how to create their intended outcomes.									
Technical knowledge (what, when, how of D&T)					Specific Vocabulary (language and terminology of D&T)				
Key Strands					Key Strands				
Textiles	Structures	Mechanisms	Cooking & nutrition	Designers	Textiles	Structures	Mechanisms	Cooking & nutrition	Design process
Strands									
Textiles		Structures			Mechanisms			Cooking & nutrition	
Designing Understanding users and purposes Generating, developing, modelling and communicating ideas									
Making Planning Practical skills and techniques									
Evaluating Own ideas and products Existing products									



Iterative Design Process

Designing, making and evaluating is not a linear process and these elements combine as ideas are communicated and clarified through action, further thinking and action.

