



Design and Technology
Catshill Middle School
Catshill Federation Subject Rationale

Design and Technology at Catshill Federation	Why is this subject important?	How is Design and Technology organised?
<p>Design and Technology across the Catshill Federation is an inspiring, stimulating and practical subject, with a desire to deliver a curriculum with creativity at its core. We are committed to planning, developing and delivering schemes of work that provide our students with the widest range of opportunities available. Using the National Curriculum for guidance our lessons cover a wide range of material areas including food, textiles, electronics, resistant materials and product design. Providing pupils with the knowledge to be future ready. Engaging our pupils with challenging design briefs that solve for varied clients and giving them the opportunities to bridge their covid skills gap, focussing on increasing hands-on practical tasks and building their confidence.</p> <p>It is our intention to foster resilience, opportunity, achievement, challenge and to nurture every child as an individual. Practical skills, highlighting health and safety, are encouraged with a view to the wider skills valued by employers. The department firmly believes that students learn best by 'doing' and by allowing them to experiment and take risks, in a safe and positive learning environment. This is achieved through imaginative teaching that embraces new technologies and resembles modern industrial processes, whilst retaining the best of traditional practices. Pupils design and make products that solve real and relevant problems, within a variety of contexts, considering their own and others' needs, wants and values.</p>	<ul style="list-style-type: none"> ● To enable pupils to combine their designing and making skills with knowledge and understanding in order to design, make and evaluate high quality products. ● To value the work of all pupils, using assessment as a means to enhance learning, monitor progress, and to form a basis for meeting each pupil's individual needs. ● To develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. ● To motivate pupils by providing interesting and stimulating experiences. ● To help children understand and apply the principles of nutrition and learn how to cook. ● To inspire students to explore a wide range of careers by fostering creativity, critical thinking, and practical problem-solving skills. Through hands-on projects and exposure to real-world design challenges, students will gain an understanding of various industries such as engineering, product design, fashion, architecture, and technology. The curriculum will equip students with the skills necessary to pursue further education and training in these fields, while encouraging them to consider the impact of design and technology on society, sustainability, and innovation. 	<ul style="list-style-type: none"> ● EYFS all pupils access continuous provision throughout the year with some specialist days. ● In KS1 all pupils receive two afternoons per half term (4 hours in total). ● In lower KS2 (year 3 & 4) all pupils receive one day per half term. ● In upper KS2 (year 5 & 6) all pupils receive one 60 minute lesson of DT per week. ● In KS3 all pupils receive two 60 minute lessons of DT per week. <p>The inclusion of all pupils in this subject is to extend their experiences not necessarily found at home, this can develop their understanding of different skills needed for different careers and widen their future opportunities. Utilising our CMS kitchen facilities to provide all of the ingredients for our pupils to cook a wide range of healthy meals, making sure that none of our disadvantaged pupils miss out on a valuable life skill. By utilising our CMS workshop facilities and resources, CFSN can enhance their knowledge and skills, gaining access to specialised provisions that support continuous learning and development of the curriculum.</p>



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How are other subjects linked?	How is the curriculum adapted?	How is progress measured?
<ul style="list-style-type: none"> ● Design and Technology integrates multiple subjects, allowing students to see how different areas of knowledge connect and how they can be applied in real-world scenarios. This holistic approach enhances learning by making concepts more engaging, relevant, and applicable, helping students understand the interdisciplinary nature of problem-solving in design and technology. ● Science links through movement and mechanisms projects and electronic circuits. ● Humanities links through cultural recipes and Fairtrade. ● Maths links through measuring and accuracy. ● English links through writing plans and evaluations. 	<ul style="list-style-type: none"> ● CMS dedicated technician/TA to aid practical activities or pupils needing support ● Bespoke differentiation for pupils with EHCPs. ● differentiated instruction, ● incorporating hands-on learning, ● offering alternative assessments, ● fostering an inclusive, supportive classroom environment ● create an engaging, flexible, and accessible learning experience that promotes creativity, critical thinking, and practical problem-solving for all learners. 	<ul style="list-style-type: none"> ● Pupils demonstrate their ability in DT through their understanding of theoretical concepts and their production of practical pieces or recipes. The teacher assesses the pupils' work through both formative and summative assessment. ● Individual verbal feedback is provided regularly to all learners. ● Work is live marked with allocated time during each project for children to reflect on feedback, address corrections and undertake challenges to extend learning. ● Children also self-assess each piece of work against the 'Steps to Success'. ● Peer assessment is used during some activities where the pupils can critique each other and further progress from comments made. ● Pupils can track their progress at the start and end of each topic using a project assessment table.