

Intent	Implementation
<p>The Primary Knowledge Curriculum (PKC) Design and Technology (DT) curriculum is designed to give pupils a deep understanding of the vital role design plays in society. Its intent is to ensure children use knowledge, creativity, and imagination to design and make purposeful, functional, and appealing products for real users and contexts. The curriculum is structured around three core areas – <i>cook</i>, <i>sew</i>, and <i>build</i> – each interwoven with the cross-cutting themes of sustainability, environment, enterprise, and innovation. In this way, the intent is to equip children with both practical life skills (such as nutrition and cooking) and technical knowledge (such as mechanical systems and fabric properties), while also fostering curiosity, problem-solving, and an appreciation of design’s impact in the wider world.</p>	<p>Implementation is achieved through carefully sequenced units taught in blocks, typically over five hours per term, which makes the curriculum both practical and manageable. In <i>cook</i> units, children progressively build culinary skills while exploring concepts like nutrition, seasonality, and global food culture. In <i>sew</i>, pupils develop increasingly complex textile skills – from simple gluing to embroidery, appliqué, and upcycling fashion – with concepts like industrialisation, fast fashion, and recycling embedded throughout. In <i>build</i>, children explore structures, mechanical and electrical systems, culminating in sophisticated products such as cam toys or water walls. Each <i>sew</i> and <i>build</i> unit follows the design cycle: research and investigate, design, make, use, and evaluate, ensuring fidelity to the design process. Links are explicitly made to prior knowledge in science, history, and geography, deepening cross-curricular connections and strengthening long-term learning.</p>
Impact	
<p>The intended impact of PKC DT is that pupils leave our academy with secure technical knowledge, practical skills, and design thinking that prepares them for the demands of secondary education and beyond. By engaging with real and relevant contexts, children learn to critically evaluate existing products, design for specific users and purposes, and consider sustainability and innovation. They also develop cultural capital through understanding how design and technology has shaped and continues to shape the modern world. Ultimately, our DT curriculum aims to instil confidence, resilience, and creativity, equipping pupils not only with life skills such as cooking and sewing but also with the ability to apply scientific and mathematical knowledge in meaningful, applied contexts.</p>	
Progression	
<p>Progression is carefully mapped across year groups, beginning with the Early Years Foundation Stage (EYFS). In EYFS, children develop the foundational skills of cutting, joining, constructing, exploring textures, and using simple tools — all of which build the procedural and fine-motor control needed for DT. They also begin to design with purpose by talking about what they want to make and evaluating whether it works, laying the groundwork for the design cycle. From this base, the PKC DT curriculum systematically builds skills and knowledge through KS1 and KS2. For example, in textiles, children move from gluing fabric in Year 1 to mastering multiple stitching techniques and embroidery by Year 6, where they independently choose methods to upcycle clothing. In mechanics, they progress from wheels and axles in Year 1 to gears, cams, pulleys, and electrical systems in upper key stage 2. In cooking, they begin with simple cutting and measuring in Year 1 and culminate in creating multi-dish meals in Year 6. This coherent sequence ensures that children revisit and deepen both procedural knowledge (skills) and declarative knowledge (concepts), gradually working towards mastery.</p>	

Design and Technology Year Group Map

Year Group	Autumn	Spring	Summer
Year 1	Cook Dips and Vegetables Jam Tarts/Mince Pies	Sew Animal Sock Puppets	Build Vehicles
Year 2	Cook Pizza Gingerbread	Sew Pencil Cases	Build Moving Pictures
Year 3	Sew Key Rings/Decorations	Build Pop-up Books	Cook Bread and Butter Pasta
Year 4	Sew Cushions	Build Moving Miniature Playgrounds	Cook Ratatouille and Couscous Apple Crumble
Year 5	Build Cams Toys	Book Honey Cake Pitta Bread	Sew Bags
Year 6	Build Water Wall	Cook Mezze Build Electrical Toys- part of science Electricity unit	Sew Upcycling Fashion