

St Joseph's Catholic Primary School



Design & Technology Rationale

INTENT

At St. Joseph's Primary, we are DESIGNERS.

We want our children to love design technology. We want them to feel ambitious and feel able to access roles as architects, graphic designers, chefs or carpenters.

Design and Technology is dynamic and multidimensional. It is our intention that our DT curriculum will provide opportunities to solve real and relevant problems, allowing our pupils to develop essential everyday skills and unlock their potential to be the designers and innovators of tomorrow. The DT curriculum will encourage children to learn, to think and intervene creatively to solve problems both as an individual and as part of a team.

Design and Technology will allow all St. Joseph's pupils to put their learning from other areas of the curriculum into practice, and will work to enhance and deepen their understanding of those areas, including maths, computing, science, and art.

St. Joseph's pupils will learn about cooking, food and nutrition, ensuring that they acquire the fundamental life skills in order to be able to feed themselves healthily and independently, whilst learning about where food comes from, therefore making connections with their geographical and scientific knowledge.

"Design is not just what it looks like and feels like. Design is how it works."

Steve Jobs, co-founder of Apple, Inc.

IMPLEMENTATION

St. Joseph's adopted the CUSP Design and Technology curriculum starting in September 2023. Our curriculum is structured to introduce and revisit knowledge, following the principles of instruction, guided by understanding how the memory works and cognitive load theory.

The CUSP Design and Technology curriculum is organised into blocks with each block covering a particular set of disciplines, including food and nutrition, mechanisms, structures, systems, electrical systems, understanding materials and textiles. Vertical progression in each discipline has been deliberately woven into the fabric of the

curriculum so that pupils revisit key disciplines throughout their Primary journey at increasing degrees of challenge and complexity.

In addition to the core knowledge required to be successful within each discipline, the curriculum outlines key aspects of development in the Working as a Designer section. Each module will focus on promoting different aspects of these competencies. This will support teachers in understanding pupils' progress as designers more broadly, as well as how successfully they are acquiring the taught knowledge and skills.

Working as a Designer			
Design	Make	Evaluate	Apply
The art or process of deciding how something will look or work.	Create something by combining materials or putting parts together.	Form an opinion of the value or quality of something after careful thought.	Use something or make something work in a particular situation.

OVERVIEW OF KNOWLEDGE

The overview provides a list of the expected outcomes for the block provides details of the design knowledge and skills pupils will be expected to have acquired by the end of the block. It includes detailed explanations of the core knowledge covered in each block.

KNOWLEDGE NOTES

Knowledge notes focus pupils' working memory to the key question that will be asked at the end of the lesson. It reduces cognitive load.

RETRIEVAL PRACTISE

Retrieval practise is planned into the curriculum through spaced learning and interleaving and as part of considered task design by the class teacher. Teaching and learning resources and provided for class teachers so they can focus their time on subject knowledge and task design.

VOCABULARY

The units are supported by **vocabulary modules** which provide both resources for teaching and learning vital vocabulary and provide teachers with Tier 2 and 3 vocabulary with the etymology and morphology needed for explicit instruction details relevant idioms and colloquialisms to make this learning explicit.

We aim to provide a high challenge with low threat culture and put no ceiling on any child's learning, instead providing the right scaffolding for each child for them to achieve.

IMPACT

The impact of this curriculum design will lead to outstanding progress over time across key stages relative to a child's individual starting point and their progression of skills.

Children will therefore be expected to leave St. Joseph's reaching at least age related expectations for Design and Technology. Our Design and Technology curriculum will also lead pupils to be enthusiastic learners, evidenced in a range of ways, including pupil voice and their work.