



St Monica's Catholic Primary School

Philosophy

Every child is a unique gift from God, with his or her own unique gifts.

Our Catholic school, inspired by the teaching of Jesus Christ, will always endeavour to meet the needs of every child within our school.

At St. Monica's, we strive to ensure that all children and staff are offered the opportunity to develop to their full potential in individual, educational, moral, intellectual and spiritual needs.

Our Mission Statement is "Let Trust, Respect and Love live here."

What we teach and what your children learn in DT

Please see below a summary of our plans (organised by Year Group and Term) for teaching and learning in DT in our school.

If you want further information on the curriculum, including how it is differentiated for children within classes who are at different stages of learning including your child, please contact your child's teacher or email the school on stmonicas@st-monicas.co.uk

Our Intent, Implementation and Impact statement for DT

Intent:

Design and technology gives children the opportunity to develop knowledge, skills and understanding of design, innovation and building. This helps nurture their creativity and problem-solving skills as they attempt to build and construct a range of varying products.

Children learn to use a range of techniques which include, sewing, electronics, food technology and construction using mechanisms, in order to create a quality product. Children are encouraged, right from the Early Years, to experiment with and investigate, ways of building and strengthening using various different materials.

We aim to, wherever possible, to link DT work to other disciplines such as Science, Computing, Mathematics, Engineering, and foundation subjects such as Art and History. The children are also given opportunities to reflect upon and evaluate their designs against a set of criteria.

Implementation:

DT units begin with a pre-assessment of current knowledge and vocabulary. Key vocabulary is identified for each unit taught as in the key vocabulary for each topic as above. These are explicitly taught during the learning sequence and teachers and pupils continually assess the understanding of these. Along with our progressive knowledge curriculum, DT skills are consolidated and built upon through each unit and year group. Key areas of learning are revisited at the start of each unit within the pre-assessments, making clear links made to previous learning. This allows for pupils to consolidate their knowledge and thus gain a broad and deep understanding of their given topic. Our DT plans state progressive knowledge and skills to ensure a full coverage. Our plans are differentiated beyond the core knowledge listed to provide for the learning needs of all learners and to ensure all learners, including SEND, Pupil Premium and high attainers, are challenged, including through cross curricular links. Classroom working walls reflect the learning journey of the class, highlighting key knowledge, skill development and target vocabulary. At the end of a unit, post-learning assessments provide an opportunity for pupils to demonstrate what they have learnt across their given topic and reflect upon and consolidate their learning. These also provide formative assessment for future learning in addition to the informal assessment which has taken place throughout the topics to close gaps, including with regard to previous learning.

When designing and making, the children are taught to:

Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular individuals or groups.
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional diagrams.

Make

- select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately.
- select from and use a wider range of materials and components, including construction materials, mechanisms such as cams, pulleys and pneumatics, textiles, electronics and ingredients, according to their functional properties and aesthetic qualities.

Evaluate

- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.
- understand how key events and individuals in design and technology have helped shape the World.

Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures.
- understand and use mechanical systems in their products, such as wheels and axels. CAMs, pulleys, hydraulic and pneumatic systems.
- understand and use electrical systems in their products.
- apply their understanding of computing to program, monitor and control their products.

Key skills and key knowledge for DT have been mapped across the school to ensure progression between year groups. This also ensures that there is a context for the children's work in DT; that they learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study.

Impact:

Children will be able to:

- draw on their creative, technical and practical skills needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- build and apply a repertoire of knowledge, understanding and skills in order to research, design and make high-quality prototypes and products for a wide range of users and critique, evaluate and test their ideas and products against design criteria and evaluate the work of others.
- Select from and use a wider range of materials and components (including construction materials, and mechanisms such as wheels and axels, CAMs, Pulleys, hydraulic and Pneumatic systems textiles and ingredients) according to their function and looks.

Children of all abilities and backgrounds achieve well in DT as measured throughout topics, including assessment as above and end of topic judgments, including about gaps in knowledge and skills filled. Children are prepared to access the DT curriculum (and related topics in other subjects) at secondary school and beyond.

DT whole school overview

PLEASE KEEP TO THE ORDER AS STATED HERE (it builds on skills - spiral curriculum)

Year group	Advent		Lent		Pentecost	
	HT1	HT2	HT3	HT4	HT5	HT6
Reception		DT + Christmas craft: Salt dough decoration		DT + Easter craft: Egg threading		DT + Summer craft: Salt painting
Y1/ 2 Cycle A		DT Structures: Stable Structures Pencil pot (5 Lessons)		DT Textiles: Puppets (5 Lessons)		DT Cooking and nutrition: Smoothies (5 lessons) Stand Alone Lesson
Y1/2 Cycle B		DT Structures: Option 2: Baby bear's chair (4 Lessons)		DT Mechanisms: Fairground wheel (5 lessons)		DT Mechanisms: Making a moving monster (4 lessons)
Y3		DT Cooking and nutrition: Eating seasonally (6 lessons)		DT Structures: Constructing a castle (4 Lessons) Stand Alone Lesson Mechanical systems - Pneumatic toys DO: Lesson 1		DT Digital world: Wearable technology (6 Lessons) Stand Alone Lesson Textiles - Cross stitch and applique / cushions Do: lesson 1
Y4		DT Structures: Option2 Pavilions (4 Lessons) Stand Alone Lesson Textiles - (DO lesson1)		DT Mechanical systems option 2: Making a slingshot car (5 Lessons)		DT Electrical systems: Torches (4 Lessons) Stand Alone Lesson Cooking and Nutrition - Adapting a recipe (DO: lesson2)
Y5		DT Electrical systems: Option 2 Doodlers (4 Lessons)		DT Mechanical systems Gears and Pulleys (5 lessons)		DT Cooking and nutrition: Developing a recipe (6 lessons)
Y6		DT Textiles -Bags (5 lessons)		DT Structures: Option 2 Playgrounds (4 Lessons)		DT Digital world: Navigating the world (5 Lessons)