



SAINT JOHN WALL CATHOLIC SCHOOL

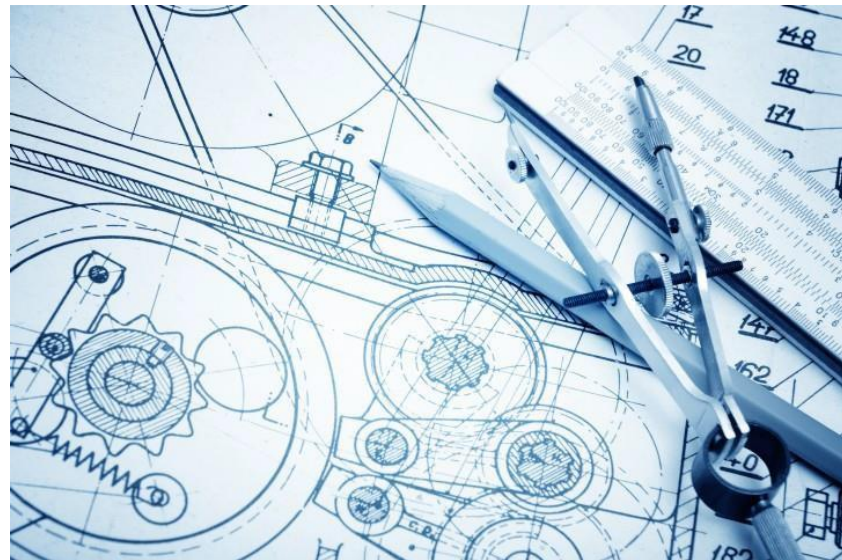
A Catholic School For All



Departmental Schemes of Work

Curriculum Intent: "To educate each and every unique child in our care to hear and respond to what God calls them to be".

Year 7 Design and Technology



Chronicles 26:15

In Jerusalem he made engines, invented by skillful men, to be on the towers and the corners, to shoot arrows and great stones. And his fame spread far, for he was marvelously helped, till he was strong.

Design & Technology and Engineering Curriculum Intent

Mission Statement	School Curriculum Intent	Curriculum Intent
'To educate	Our skilled teachers and support staff live out their vocation to serve and teach children and young people at Saint John Wall Catholic School	<i>Our Design & Technology/Engineering department is part of the Art & Design family. We have one subject specialist and teachers with a background in design. Our pedagogy is mainly project-based, where pupils develop knowledge and skills in the design and the creation of products to solve problems in the real world. The curriculum is sequenced from KS3, rotating half way through the year with Food. We deliver a curriculum that is logically sequenced around an in-depth project, beginning with pupils' understanding how to conduct themselves in the workshop, understanding the properties of materials, and how to apply their knowledge and skills in the use of tools, to create their design. Our pedagogy enables pupils to hone the fundamental understanding of product development through modelling of different levels of techniques, scaffolding to build pupils' confidence, and providing opportunity to be creative and experimental with key concepts so that they can critically evaluate product ideas.</i>
each and every	We are 'A Catholic School For All' and we welcome pupils from each and every diverse background, faith and culture into the Saint John Wall community.	<i>All pupils have access to a creative and stimulating curriculum, where we foster a positive attitude to help pupils make sense of their world, and develop insight into potential products that can change the world in the future. Our Curriculum reflects our Catholic ethos, as we promote the importance of generating creative ideas collectively, by providing plenty of opportunities for pupils to work together to give them the chance to discuss their ideas and feelings about their own work.</i>
unique child	We value human dignity and recognise every child as a unique individual made in the image of God.	<i>Our curriculum actively encourages pupils' creative thinking. Pupils make use of their numeracy and literacy skills as well as use and apply, an array of knowledge and skills from several subjects across the curriculum; including developing pupils' aspirations for STEM subjects. This enables pupils to understand the links between Design Technology and the real world.</i>
in our care	We provide high levels of care within a respectful and disciplined environment to safeguard children's wellbeing, welfare and safety.	<i>As a practical based subject, we pay close attention to the safety and wellbeing of pupils. Workshop routines ensure that pupils are mindful of health and safety rules. We have high expectations and promote positive attitudes to learning so that pupils can work in a safe and orderly environment.</i>
to hear	We instil SJW values and encourage spiritual, moral, social, cultural and emotional personal development so that our young people are open to hear God's calling.	<i>The study of design technology and engineering, fosters pupils' personal development as they are encouraged to reflect on what they see, develop ideas and solutions which stimulates a sense of awe and wonder about the natural world, human endeavour and our innate ability to be active and curious with our talents and gifts. Pupils are expected to be respectful as they peer assess the work of others. Pupils deepen their cultural understanding as they reflect on the many products and designs that have helped to shape our world.</i>
and respond	We foster our young people's gifts and talents so they are equipped with skills, knowledge and qualifications to create opportunities to be able to respond to God's calling.	<i>Our ambition is for pupils to never take for granted the creativity and ingenuity of human endeavour. We want to inspire pupils to be the innovators in the world of technology, developing and sharing their creative talents to be the problems solvers of the future. We are a successful department and provide two very popular pathways for our pupils: GCSE Design Technology and a vocational qualification in Engineering.</i>
to what God calls them to be'	Taking Jesus Christ as a role-model we help pupils understand what God calls them to be; informed and responsible citizens whose vocation in life contributes to peace, tolerance, justice and service in both our local community and wider society.	<i>Our schemes of work lead pupils onto A Level/Level 3 qualification. There are apprenticeships as well as occupations such as interior designer and architecture, that pupils could consider beyond their time with us at SJW. Our ultimate ambition is for pupils to be grateful for the skills we have been given and the opportunities to use them without being afraid to try new ideas and ask searching questions.</i>

Year 7 Design and Technology Scheme of Work Overview

Sequencing of topics	Students study Product Design on rotation is Food Nutrition. They study one making project in depth over 1 and half terms, rotating after February half term. Year 7 design and make a key ring.		
Calendared assessments	At the end of each half term.	Development homework	Homework booklet available in the homework and exams section of the school website. Please also research the career pathways using the links below.
Career Links	<ul style="list-style-type: none"> • Metallurgist- https://www.prospects.ac.uk/job-profiles/metallurgist • Animator- https://nationalcareers.service.gov.uk/job-profiles/animator • Product Designer- https://www.prospects.ac.uk/job-profiles/product-designer 		
Personal	<i>Cross curricular -</i>	We encourage the development of skills, knowledge and understanding that help pupils make sense of their world as an integral part of the school's work. We provide a range of experiences that encourage exploration, observation, problem solving, critical thinking and discussion. Design and technology utilises skilled acquired in Maths, Science, IT, English, RS, in fact most subjects across the curriculum	
	<i>Our School Values-</i>	<p>Grateful – For the skills we have been given and the opportunities to use them.</p> <p>Hopeful – That our future needs will be met by our vocational needs</p> <p>Curious – about everything we do, don't be afraid to try new ideas and ask searching questions</p>	
	<i>SMSC -</i>	The teaching of design and technology offers opportunities to support the social development of our pupils through the way we expect them to work with each other in lessons. Our groupings allow pupils to work together, and give them the chance to discuss their ideas and feelings about their own work and the work of others. Through their collaborative and cooperative work across a range of activities and experiences in design and technology, the pupils develop respect for the abilities of other pupils, and a better understanding of themselves.	
	<i>Cultural capital-</i>	Design technology prepares pupils to take part in the development of tomorrow's rapidly changing world. Creative thinking encourages pupils to make positive changes to their quality of life. The subject encourages pupils to become autonomous and creative problem- solvers, both as individuals and as part of a team. It enables them to identify needs and opportunities and to respond by developing ideas, and eventually making products and systems.	
		What knowledge will pupils develop? (Including key terminology)	What skills will pupils develop? (Including literacy & Numeracy)
Progression model	<p>Students study Design and Technology for half the academic year. Year 7 students design a key ring. The key ring is made from different metals.</p> <p>Before practical work commences, students have to complete a booklet, contents include health and safety, product analysis, design brief, specification, customer/user requirements, designs and evaluation.</p> <p>When practical work commences, students are shown how to use hand tools and how to stay safe in a workshop. They produce a template of their chosen design and transfer the design onto a piece of brass. To improve aesthetics the product is adorned with gems or paint is applied. At the end of the activity an evaluation sheet is completed highlighting WWW and EBI.</p>		<ul style="list-style-type: none"> • How to work safely in a workshop • How to use basic hand tools <ul style="list-style-type: none"> Sawing Filing Drilling Finishing skills • Material properties (ferrous and non-ferrous metals) • Product analysis • Evaluation • Sketching • Packaging
		<p>Skills being focussed on during the product.</p> <p>The most import skill students develop during this product is the skill to conduct themselves correctly in the workshop. It is an environment few have encountered before, different to any other classroom.</p>	