SAINT JOHN WALL CATHOLIC SCHOOL
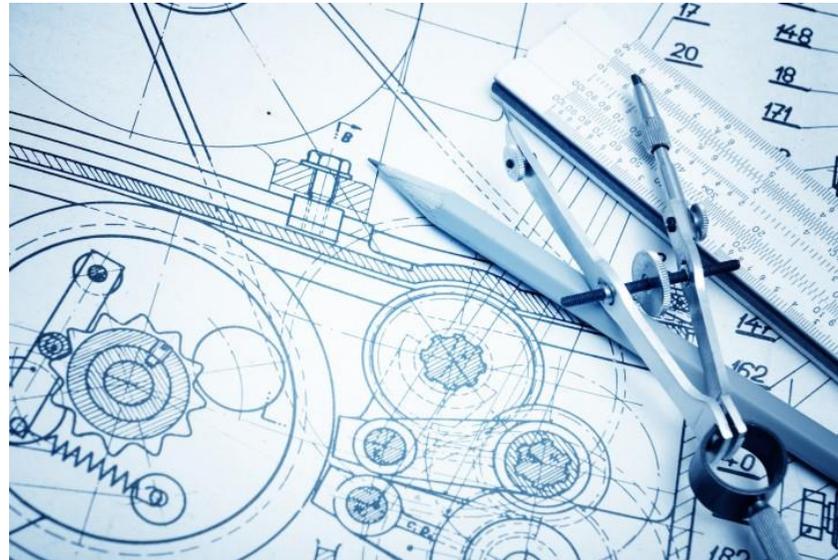## *A Catholic School For All*

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.

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

- **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

Cross curricular -	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
Our School Values-	**Grateful –** For the skills we have been given and the opportunities to use them. **Hopeful** – That our future needs will be met by our vocational needs **Curious** – about everything we do, don't be afraid to try new ideas and ask searching questions
SMSC -	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.
Cultural capital-	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.

Progression model

What **knowledge** will pupils develop? *(Including key terminology)*	What **skills** will pupils develop? *(Including literacy & Numeracy)*	
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. 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. 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.	• How to work safely in a workshop • How to use basic hand tools Sawing Filing Drilling Finishing skills • Material properties (ferrous and non-ferrous metals) • Product analysis • Evaluation • Sketching • Packaging	**Skills being focussed on during the product.** 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.