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".

KS3 Maths

Year 8 Maths Scheme of Work Overview				
Sequencing of topics	Autumn term 1:	**Number/Algebra 1:** Integers, powers and roots/Sequences, functions and graphs **Geometry and Measures 1:** Geometrical reasoning: lines, angles and shapes, Construction **Statistics 1:** Probability and Specifying a problem, planning and collecting data	Spring term 2:	**Statistics 2:** Processing and representing data **Algebra 4:** Equations and formulae **Geometry and Measures 4:** Geometrical reasoning: lines, angles and shapes,
	Autumn term 2:	**Number 2:** FDPRP **Algebra 2:** Equations and formulae **Geometry and Measures 2:** Measures and mensuration	Summer term 1:	**Number 4:** Calculations, Measures **Algebra 5:** Graphs **Statistics 3:** Probability and Interpreting data and discussing results
	Spring term 1:	**Number 3:** Place value, calculations, calculator methods, FDPRP, solving problems **Algebra 3:** Integers, powers and roots, Sequences, functions and graphs **Geometry and Measures 3:** Transformations	Summer term 2:	**Geometry and Measures 5:** Lines, angles and shapes, Transformations, Mensuration **Number 5:** Solving problems including FDPRP **Algebra 6:** Sequences, functions and graphs, Equations and formulae
Calendared assessments	- Two Assessment week exams (Spring Term and Summer Term). - Thirteen "Building a Mathematician" assessments at the appropriate levels (approximately 4 per term). - Argument and Proof Tasks 1 to 3 (one per term) and Geometric Reasoning Tasks 1 to 3 (one per term).			
Personal Development *(Cross curricular, SJW Values, SMSCV, cultural capital)*	The departmental focuses on promoting "Active and curious" on a daily basis through problem solving by developing effective questioning through explicitly encouraging the pupils to ask 'what if..', 'what do you think..', 'how do you know…'so they remaining active and curious in their search for new methods and solutions. Teamwork through peer assessment and group work underpins the schemes of learning. Students learn cross curricular skills which they will need to use appropriately in other subjects including tables, graphs, reading scales, units, equations, shapes and measures. Students work together in all areas of Mathematics to support each other and build mutual respect for one another in an environment where they are allowed to make mistakes and learn from them. This fosters confidence and builds self-esteem, encouraging students to take risks and become active and curious lifelong learners whilst using their mathematical skills in all aspects of life.			
Progression model	What **knowledge** will pupils develop? *(Including key terminology)*		What **skills** will pupils develop? *(Including literacy & Numeracy)*	
	The knowledge developed will depend on the starting level for different pupils. The aim is to build on the knowledge pupils bring to each topic by the use of diagnostic activities at the start of each unit of work to ensure that pupils are taking the appropriate next steps in their learning from their individual starting points. The Scheme of work uses Progression Plans to ensure appropriate progression paths and levels of challenge for pupils of differing abilities.		Pupils begin lessons with a Literacy starter to formalise definitions of key terminology, and practice using that key terminology in context. Representing – students are given the opportunity to explore problems, choosing between different representations. Analysing – drawing accurately annotated diagrams including scale drawings Interpreting – interpreting features of a diagram or other representation and relating those features to the context or situation represented.	
Development homework	Online development homework is set on Maths Watch each half term with a selection of practice questions on the topics which pupils have covered in lessons. Staff steer the pupils to appropriate sections at suitable times during the course.			