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”.

KS4 Maths

Year 10 Maths Scheme of Work Overview				
Sequencing of topics	Autumn term 1:	**Foundation:** (6b) Angles of Polygons, (7a) Statistics and sampling, (7b) Averages, (8a) Perimeter and Area. **Higher:** (6c) Quadratic, cubic and other graphs, (7a) Perimeter, area and circles, (7b) 3D forms and volume, cylinders, cones and spheres.	Spring term 2:	**Foundation:** (10b) Enlargements & Combinations, (11a) Ratio, (11b) Proportion. **Higher:** (10) Probability, (11) Enlargements & Combinations, (12) Similarity & Congruence.
	Autumn term 2:	**Foundation:** (8a) Perimeter and Area, (8b) 3D forms and Volume, (9a) Real life graphs. **Higher:** (7c) Accuracy and bounds, (8a) Transformations, (8b) Constructions, loci and bearings.	Summer term 1:	**Foundation:** (12) Pythagoras & Trigonometry, (13a) Probability I, (13b) Probability II. **Higher:** (13a) Graphs of Trig functions, (13b) Further Trig, (14a) Collecting data.
	Spring term 1:	**Foundation:** (9b) Straight line graphs, (10a) Translations, Reflections & Rotations, (10b) Enlargements & Combinations. **Higher:** (9a) Solving quadratic and simultaneous equations, (9b) Inequalities, (10) Probability.	Summer term 2:	**Foundation:** (13b) Probability II, (14) Multiplicative reasoning, (15a) Plans & Elevations. **Higher:** (14a) Collecting data, (14b) Cumulative frequency & box plots, (15) Quadratics, expanding, sketching graphs, graphs of circles, cubes & quadratics.
Calendared assessments	• Three Assessment week exams (one per term). • 13 Topic Tests for their Learning Journals.			
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.			
Progression model	What **knowledge** will pupils develop? *(Including key terminology)*		What **knowledge** will pupils develop? *(Including key terminology)*	
	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 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.	
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.			