



Whitworth Community High School Mathematics Department

Teacher in Charge/Faculty Leader: Ms Y Jan

Year Group 11

Organisation of the classes: Students in year 11 receive 4 hours of mathematics teaching a week

Students are streamed according to their ability in mathematics based on their KS scores as well as baseline assessments at the start of the year. Teacher assessments throughout the year further contribute to ensuring that our students are in the appropriate group based on their mathematics ability.

Key Concepts

Students in year 11 will be focusing on mathematics which links a few topic areas together and understanding how to recognise such questions in order to answer them fully. Students will gain confidence and resilience in answering 4, 5 and 6 mark questions.

What skills do I use in this subject?

Using and applying formulae
Learning Formulae
Identifying misconceptions
Evaluating
Reasoning
Problem Solving
Justifying and explaining
Generalizing
Construction - using a protractor and compass

What will you be learning?

As well as completing the scheme of learning in the autumn term, students will be revisiting key topics to consolidate and master the knowledge, skills and understanding required for the GCSE examinations.
New GCSE content added to the new GCSE curriculum will be reinforced and formulae learnt to ensure access to the GCSE questions our students will be presented with.
Students will practise how to answer reasoning and problem solving questions with modelled answers shared by their class teacher.

How will you be learning?

Students will concentrate on the three elements of fluency, reasoning and problem solving which will prepare our students for the 9-1 GCSE comprising of three papers. This will be undertaken through worked examples by the teacher with modelled answers leading to paired and group discussions to develop confidence progressing to resilience in achieving in mathematics in the external examinations.

<p>How will your learning be assessed?</p> <p>Students are assessed regularly with low stakes fortnightly fluency checks as well as a pre-mock exam in October and formal mock exams in November and February/March 2018.</p> <p>External Examinations Paper 1 (1 hour 30 minutes) - Non Calculator Paper 2 (1 hour 30 minutes)- Calculator Paper 3 (1 hour 30 minutes) - Calculator</p>	<p>Home Learning</p> <p>Home Learning is primarily set on Hegarty.com though class teachers may also set additional written home learning to reinforce, consolidate and review knowledge, skills and understanding.</p> <p>Home learning will also regularly involve revision and this can also be done on Hegarty.com through watching the videos and making notes working through the examples before trying the quiz questions. Students need to be encouraged to use Hegarty.com independently without having tasks assigned by the teacher as they should be aware of their revision and development needs in preparation to the GCSE examinations.</p>
<p>Equipment needed?</p> <p>Casio Calculator Geometry Set including protractor and compass</p>	<p>How can your parents support your learning?</p> <p>We hope parents can support and encourage students to revise and revisit topics regularly and become independent learners developing resilience to answer some complex questions involving reasoning and problem solving.</p> <p>We further encourage parents to regularly test students to ensure the formulae are learnt so that students have full access to the questions presented.</p> <p>In preparation for the GCSE examinations we encourage students to be doing 1 hour of mathematics each evening to ensure they achieve their personal best outcomes.</p>
<p>SMSC Links – Focus on Aspirations</p> <p>Pi Day The history of mathematics in Islam and across the world relating to RS Famous mathematicians - Euler, Pythagoras, Venn, Euclid</p>	<p>What extra-curricular activities or enrichment opportunities are available?</p> <p>Students are invited every lunch time to the 'maths drop-in clinic' to use Chromebooks to do a quiz on Hegarty Maths.</p>