



Sutton House Academy

Scheme of Work

Subject: Maths

Year Group: 11

Teacher: Michelle Gater

**Sutton House Academy
Scheme of Work**

Academic Year:	From: Sept 2020	To: July 2021	Location: Sutton House Academy	Room: Maths
Course Title: Maths			Tutor/s: Michelle Gater	Learning support: (if applicable) -
Unit: (if applicable) -			Awarding Body: Edexcel	Level: MATHEMATICS FOR GCSE
Overall aim of the programme: The aim of this course is to enable students to develop fluent knowledge, skills and understanding of mathematical methods and concepts. Acquire, select and apply mathematical techniques to solve problems. To reason mathematically, make deductions and inferences and draw conclusions. To be able to comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context. As per the Pearson GCSE curriculum.				

Lesson Number	Lesson Objectives/Outcomes (SMART)	Content By the end of this session pupils should be able to...	Resources	Differentiation	Literacy & Numeracy links/ NC	Assessment for Learning/Assessment method
HALF TERM						
25	To be able to cancel ratio to its simplest form	To be able to simplify a ratio by dividing by a common factor	MATHEMATICS FOR GCSE page 63 ex 1 & 1 Maths books Pens	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
26	To be able to write ratios in the form 1:n	To be able to use fractions or decimals with ratios	MATHEMATICS FOR GCSE page 65 ex 3 Maths books Pens	Differentiated levels appropriate to individual students as per levels and	Discussion Reading questions	Peer assessment Teacher evaluation of work completed

				stage. See weekly plan. Extension tasks		
27	To be able to use ratio to solve simple problems	To be able to use ratios to find the actual size of an amount	MATHEMATICS FOR GCSE page 66 ex 1 Maths books Pens	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
28	To be able to find percentages of amounts without using a calculator	To be able to break down a percentage calculation into 1%, 5% and 10% in order to find a percentage of an amount	Starter exercise – sugar in drinks MATHEMATICS FOR GCSE page 76 ex 3 Maths books Pens	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
29	To be able to find percentages of amounts with a calculator	To be able to use a calculator to a percentage of an amount	MATHEMATICS FOR GCSE age 76 ex 4 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
30	To be able to express x as percentage of y	To be able to write one number as a percentage of another	MATHEMATICS FOR GCSE page 73 ex 1 & 2 Maths books Pens	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
31	To be able to collect like terms	To be able to collect like terms and understand that unlike terms are separate so you will still end up with an equation rather than an answer	MATHEMATICS FOR GCSE page 89 ex 1 Maths books Pens	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
32	To be able to simplify expressions by expanding brackets and collecting terms	To be able to effectively multiply out the brackets in order to solve the equations and simplify where possible.	MATHEMATICS FOR GCSE page 91 ex 1 & 2 Maths books Pens	Differentiated levels appropriate to individual students as per levels and	Discussion Reading questions	Peer assessment Teacher evaluation of work completed

				stage. See weekly plan. Extension tasks		
33	To be able to solve one step equations	To be able to use manipulation to get the variable on its own in order to solve the equation	MATHEMATICS FOR GCSE page 98 ex 1 & 2 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
34	To be able to solve two step equations	To be able to use a two step manipulation in order to solve the equation.	MATHEMATICS FOR GCSE page 100 ex 4 & 5 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
35	To be able to solve equations with letters both sides	To be able to manipulate an equation in order to solve it when there are letters on both sides	MATHEMATICS FOR GCSE page 102 ex 1 & 2 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
36	To be able to go over work , so far, and identify learning gaps	To go over learning, so far, and find learning gaps	Various worksheets / books as appropriate Maths books Pens Rulers Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
37	Practice exams - assessment week	Able to attempt a practice exam at a level appropriate to self under exam conditions	Resources 3, 4 & 5 Pens Pencil Calculator Ruler Protractor	Differentiated exams at appropriate level for individual	Reading writing	Teacher assessment
38	Practice exams - assessment week	Able to attempt a practice exam at a level appropriate to self under exam conditions	Resources 3, 4 & 5 Pens Pencil Ruler	Differentiated exams at appropriate level for individual	Reading writing	Teacher assessment

			Protractor			
30	Practice exams - assessment week	Able to look at exams and see how they could have achieved a better grade.	Resources 3, 4 & 5 Pens Pencil Calculator Ruler Protractor	Differentiated exams at appropriate level for individual	Reading Discussion	Teacher assessment Student assessment Peer assessment
40	Practice exams - assessment week	Able to look at exams and see how they could have achieved a better grade.	Resources 3, 4 & 5 Pens Pencil Ruler Protractor	Differentiated exams at appropriate level for individual	Reading Discussion	Teacher assessment Student assessment Peer assessment
41	To be able to solve simultaneous equations	To be able to solve equations with two unknowns	MATHEMATICS FOR GCSE page 111 ex 1 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
42	To be able to use information to write a formula	To be able to create a formula to work something out	MATHEMATICS FOR GCSE page 116 ex 1 & 2 Maths books Pens	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions writing	Peer assessment Teacher evaluation of work completed
43	To be able to substitute values into formulas	To be able to use substitution to solve a formula	MATHEMATICS FOR GCSE page 118 ex 1 Maths books Pens	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
44	To be able to Re arranging formulas to change the subject	To be able to manipulate a formula in order to change the subject and create a new formula	MATHEMATICS FOR GCSE page 121 ex 1 Maths books Pens	Differentiated levels appropriate to individual students as per levels and	Discussion Reading questions	Peer assessment Teacher evaluation of work completed

				stage. See weekly plan. Extension tasks		
45	To be able to use a function machine to find input and output values	To be able to use a function machine to resolve a calculation and use reverse calculations to find the input amount	Resources 6 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
46	To be able to use a conversion graph	To be able to successfully use a conversion graph in order to answer simple questions	Resources 7 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
47	To be able to plot graphs of vertical and horizontal lines	To be able to plot a straight line from a set of coordinates or formula	MATHEMATICS FOR GCSE page 136 ex 1 Maths books Pens Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed
48	To be able to go over work , from this half term, and identify learning gaps	To go over learning, this half term, and find learning gaps	Various worksheets / books as appropriate Maths books Pens Rulers Calculators	Differentiated levels appropriate to individual students as per levels and stage. See weekly plan. Extension tasks	Discussion Reading questions	Peer assessment Teacher evaluation of work completed

End of Autumn Term