Sutton House Academy

Scheme of Work

Subject: Maths

Year Group: 9 & 10

Teacher: Michelle Gater

Sutton House Academy							
Scheme of Work							
Academic Year:	From:	To:	Location:		Room:		
	Sept 2020	July 2021	Sutton House Acade	emy	Maths		
Course Title:		Tutor/s:	Learning support: (if a	applicable) -			
Maths		Michelle Gater					
Unit: (if applicable) -		Awarding Body:	Level:				
			Edexcel	Entry / 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 Person Exexcel criteria for Entry level 3 and Pearson GCSE curriculum.

Lesson Number	Lesson Objectives/Outcomes (SMART)	Content By the end of this unit pupils should be able to	Resources	Differentiation	Literacy & Numeracy links/ NC	Assessment for Learning/Assessment method
			HALF TERM			
25	To be able to use direct proportion to solve simple problems	To be able to solve simple questions using direct proportion to upscale amounts	KS3 book 2 page 95 exercise 5 Maths books Pens Rulers Calculators	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
26	To be able to use inverse proportion to solve simple problems	To be able to solve simple questions using inverse proportion	GCSE page 165 exercises 1, 2 & 3 Maths books Pens Rulers	Differentiated levels appropriate to individual students as per levels and	Discussion Reading questions Writing	Peer assessment Teacher evaluation of work completed

			Calculators	stage. See weekly		
				plan. Extension tasks		
27	To be able to collect	To be able to collect like terms	KS3 book 2 page 121	Differentiated levels	Discussion	Peer assessment
	simple like terms	and understand that unlike	exercises 1	appropriate to	Reading	Teacher evaluation of
		terms are separate so you will	Maths books	individual students	questions	work completed
		still end up with an equation	Pens	as per levels and		
		rather than an answer	Rulers	stage. See weekly		
			Calculators	plan. Extension tasks		
28	To be able to multiply the	To be able to effectively	KS3 book 2 page 123	Differentiated levels	Discussion	Peer assessment
	equation to expanding	multiply out the brackets in	exercise 1	appropriate to	Reading	Teacher evaluation of
	brackets	order to solve the equations	Maths books	individual students	questions	work completed
		and simplify where possible.	Pens	as per levels and		
			Rulers	stage. See weekly		
			Calculators	plan. Extension tasks		
29	To be able to solve simple	To be able to use manipulation	KS3 book 2 page 130	Differentiated levels	Discussion	Peer assessment
	equations	to get the variable on its own in	exercise 1	appropriate to	Reading	Teacher evaluation of
		order to solve the equation	Maths books	individual students	questions	work completed
			Pens	as per levels and		
			Rulers	stage. See weekly		
			Calculators	plan. Extension tasks		
30	To be able to solve two	To be able to use a two step	KS3 book 2 page 131	Differentiated levels	Discussion	Peer assessment
	step equations	manipulation in order to solve	exercise 2	appropriate to	Reading	Teacher evaluation of
		the equation.	Maths books	individual students	questions	work completed
			Pens	as per levels and		
			Rulers	stage. See weekly		
			Calculators	plan. Extension tasks		
31	To be able to create an	To be able to create a formula	KS3 book 2 page 134	Differentiated levels	Discussion	Peer assessment
	algebraic expression from	to work something out	exercise 1	appropriate to	Reading	Teacher evaluation of
	a worded question		Maths books	individual students	questions	work completed
			Pens	as per levels and	writing	
			Rulers	stage. See weekly		
			Calculators	plan. Extension tasks		
32	To be able to substitute	To be able to use substitution	KS3 book 2 page 136	Differentiated levels	Discussion	Peer assessment
	into a formula	to solve a formula	exercise 1	appropriate to	Reading	Teacher evaluation of
			Maths books	individual students	questions	work completed
			Pens	as per levels and		

			Rulers Calculators	stage. See weekly plan. Extension tasks		
33	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
34	To be able to read and plot co-ordinates in first quadrant	To be able to successfully read and plot coordinates in the first quadrant	Resources 7 Maths books Pens Rulers	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 read and plot co ordinates in all four quadrants	To be able to successfully read and plot coordinates in all four quadrants	Resources 8 Maths books Pens Rulers	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 reinforce knowledge of coordinates in order to reveal the picture	To be able to plot the coordinates effectively in order to reveal the picture	Resources 9 Maths books Pens Colouring pencils/pens Rulers Got	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 10 & 11 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 10 & 11 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 10 & 11 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 10 & 11 Pens Pencil Ruler Protractor	Differentiated exams at appropriate level for individual	Reading Discussion	Teacher assessment Student assessment Peer assessment
41	To be able to recognise and create clear and easy questions to attain relevant and unbiased information	To be able to critique questionnaires and make improvements to give clear and easy questions to attain relevant and unbiased information	Mathematics for GCSE pages 315/6 exercises 5 – 7 Maths books Pens Rulers	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
42	To be able to use data collection sheets to record data	To be able to use simple and grouped data tally charts to answer simple questions	Mathematics for GCSE page 312 exercises 1 & 2 Maths books Pens Rulers	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
43	To be able to use tally charts with frequency column	To be able to use the frequency column of a tally chart to answer simple questions	Mathematics for GCSE page 319 exercise 1 Maths books Pens Rulers	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
44	To be able to use bar charts with one or two columns to display information	To be able to read and create simple and dual bar chart successfully	Mathematics for GCSE pages 328/9 exercise 1 Maths books Pens	Differentiated levels appropriate to individual students as per levels and	Discussion Reading questions writing	Peer assessment Teacher evaluation of work completed

			Rulers	stage. See weekly plan. Extension tasks		
45	To be able to use pictograms and bar charts including half symbols	To be able to use symbols and half symbols to display and interpret data	Mathematics for GCSE pages 329/30 exercise 2 Maths books Pens Rulers	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 extract specific information from data and charts	To be able to extract data from a variety of charts and tables.	Resources 12 Maths books Pens Rulers	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 read and interpret simple pie charts	To be able to read a simple bar chart to interpret data being displayed.	KS3 book 3 pages 232/3 exercise 1 Maths books Pens Rulers protractor 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 the half term and identify learning gaps	To go over learning from 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 Writing	Peer assessment Teacher evaluation of work completed

<mark>End of Autumn Term</mark>