

AUTUMN TERM DISCOVERY MATHS 2C YEAR 8 - Kerboodle book 2C

Rights Respecting Schools (RRS) in Maths

In order to support and develop RRS in Maths at Clyst Vale Community College all teachers in the Maths Department will make sure that the following happens in every Maths lesson:

Every child is taught maths without discrimination, whatever their ethnicity, gender, religion, language or ability. (Article 2- non- discrimination)

Every child's best interests are top priority in every Maths lesson (Article 3-best interests of the child)

In all Maths lessons every child is given the right to express their views and ideas about a particular area of work and these views and ideas are considered, taken seriously and responded to by both other students and teachers. (Article 12-respect for the views of the child)

In all Maths lessons every child is free to express their thoughts and opinions about a particular area of work. Every child is given access to all information that is required (Article 13-freedom of expression)

Discipline in the Maths classroom is consistent and respects every child's dignity and their right. Every child in the classroom has the right to an education (Article 28-right to education)

Every child's mathematical ability and talent will be developed to the full. They will be encouraged to show their peers and teachers the respect that they deserve (Article 29-goals of education)

Differentiation in Maths Lessons

Differentiation is about tailoring lessons for students with individual needs. We must change the content delivery or methods of learning to ensure that every child learns in a way that is suitable for them. When done right differentiation in teaching challenges every student at an appropriate level. It allows the student to grow and succeed in a way that is fair to them. In Maths lessons we try to incorporate the following in all lessons:

Maths teachers target the majority and differentiate around.

Maths teachers keep it short and simple (KISS).

Maths teachers know their students and are clear about what they want them to achieve.

We use support staff wisely.

Maths teachers are flexible and they use a range of strategies-if it doesn't work then we stop!

We assess the students' learning using a variety of methods: formative assessment, questioning, no hands up, quizzes, think pair share, open ended tasks, tiered resources...and many more

Every Maths classroom is managed to create a safe and supportive environment.

Maths teachers share their own strengths and weaknesses.

Thought provoking questions are posed to encourage students to think for themselves and become more independent learners.

MON 6TH SEPT

Autumn term / Week 1	Chapter 1 Factors and Multiples			Workbook 2C Chapter 1 📖 Chapter 1 introduction video 📖 Chapter 1 online skills test 📖 Chapter 1 end-of-chapter test and mark scheme 📖 Fully-worked solutions: Chapter 1 in Workbook 2C	Pages 5-11
	1.1 Primes, Prime Factorisation and Index Notation	<ul style="list-style-type: none"> recognise prime numbers express a composite number as a product of its prime factors represent the prime factorisation of a number in index notation 	DF2, 7 RM5 SP1-4 N7, 12	📖 Try It! Videos 1, 3, 4	

MON 13th SEPT

Autumn term / Week 2	1.2 Highest Common Factor (HCF)	<ul style="list-style-type: none"> find the highest common factor (HCF) of a group of numbers by using prime factorisation 	DF2, 7 RM5 SP1-4 N3, 7, 12	📖 Try It! Videos 7, 9	Pages 12-14
	1.3 Lowest Common Multiple (LCM)	<ul style="list-style-type: none"> find the lowest common multiple (LCM) of a group of numbers by using prime factorisation 	DF2, 7 RM5, 6 SP1-4 N3, 7, 12	📖 Try It! Videos 11, 12, 13	15-19

MON 20th SEPT

Autumn term / Week 3	1.4 Prime Factorisation and Roots	<ul style="list-style-type: none"> understand the use of prime factorisation to find the square root and cube root of a number 	DF1, 2, 7 RM1, 5 SP1-4 N6, 7, 12, 15	k Try It! Videos 15, 16, 17, 18	Pages 20-23
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MON 27th SEPT

Autumn term / Week 4	Chapter 2 Approximation and Estimation			Workbook 2C Chapter 2 k Chapter 2 introduction video k Chapter 2 online skills test k Chapter 2 end-of-chapter test and mark scheme k Fully-worked solutions: Chapter 2 in Workbook 2C	Pages 29-32 33-36
	2.1 Rounding Numbers to Decimal Places	<ul style="list-style-type: none"> round numbers to a required number of decimal places 	DF1, 2, 7 RM1, 5 SP1-4 N1, 12, 13, 15	k Try It! Video 2	
	2.2 Rounding Numbers to Significant Figures	<ul style="list-style-type: none"> round numbers to a required number of significant figures 	DF1, 2, 7 RM1, 5 SP1-4 N1, 2, 12, 13, 14, 15	k Try It! Videos 5, 8	

MON 4th OCT

Autumn term / Week 5	2.3 Estimation	<ul style="list-style-type: none"> estimate quantities (numbers and measures) to an appropriate degree of accuracy estimate the results of computation be aware of rounding errors in the intermediate steps of calculations 	DF2, 7 RM5 SP1-4 N2, 12, 13, 14, 15	k Try It! Videos 12, 13, 14, 15, 17	Pages 37-47 52-57
	Chapter 3 Ratio, Rate and Speed			Workbook 2C Chapter 3 k Chapter 3 introduction video k Chapter 3 online skills test k Chapter 3 end-of-chapter test and mark scheme k Fully-worked solutions: Chapter 3 in Workbook 2C	
	3.1 Integer Ratios	<ul style="list-style-type: none"> use ratio notation compare quantities by ratio describe the relationship between ratio and fraction divide a quantity in a given ratio 	DF1, 2, 5, 7 RM1, 2, 5, 6 SP1-4 N3, 12 R1, 4, 5, 6, 7	k Try It! Video 6	

MON 11th OCT

Autumn term / Week 6	3.2 All Kinds of Ratios	<ul style="list-style-type: none"> solve problems involving ratio 	DF1, 2, 5, 7 RM1, 2, 5, 6 SP1-4 N3, 12, 15 R1, 4, 5, 6, 7	k Try It! Videos 8, 11, 14	Pages 58-66
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MON 18th OCT

Autumn term / Week 7	3.3 Scale Plans and Maps	<ul style="list-style-type: none"> understand and use the scale of a plan or a map 	DF2, 7 RM2, 5, 6 SP1-4 N12 R1, 2, 4, 6	k Try It! Video 19	Pages 67-76 77-81
	3.4 Rate	<ul style="list-style-type: none"> solve problems involving rate in daily life 	DF1, 2, 7 RM1, 2, 5, 6 SP1-4 N12 R1	k Try It! Video 26	

HALF TERM SAT 23RD OCT – SUN 31ST OCT

MON 1ST NOV

Autumn term / Week 8	3.5 Speed	<ul style="list-style-type: none"> recognise the relationships between distance, time and speed recognise the concepts of constant speed and average speed write speed in different units and convert it from one unit to another solve problems involving speed 	DF2, 7 RM2, 5 SP1-4 N12 R1, 10	k Try It! Video 30, 33	Pages 82-87
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MON 8TH NOV

Autumn term / Week 9	Chapter 4 Working with Percentages			Workbook 2C Chapter 4 k Chapter 4 introduction video k Chapter 4 online skills test k Chapter 4 end-of-chapter test and mark scheme k Fully-worked solutions: Chapter 4 in Workbook 2C	Pages 95-98
	4.1 Simple Interest and Reverse Percentages	<ul style="list-style-type: none"> calculate simple interest solve problems involving reverse percentage 	DF2 RM5, 6 SP1-4 N10, 12, 15 R8	k Try It! Video 3	

MON 15TH NOV

Autumn term / Week 10	4.2 Percentage Increase and Decrease	<ul style="list-style-type: none"> calculate percentage increase and decrease in quantities 	DF2 RM5, 6 SP1-4 N10, 12, 15 R8	k Try It! Videos 6, 9, 11	Pages 99-104
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MON 22ND NOV

Autumn term / Week 11	4.3 Repeated Percentage Changes	<ul style="list-style-type: none"> calculate repeated percentage change calculate compound interest solve problems involving growth and depreciation 	DF1, 2 RM5, 6 SP1-4 N7, 10, 12, 15 A2, 6 R8	k Try It! Videos 14, 16	Pages 105-111
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MON 29TH NOV

Autumn term / Week 12	Review and assessment: Review Exercise 1		DF2, 7 RM5, 6 SP 1-4 N3, 7, 10, 12, 13, 14, 15 R4, 5, 6, 7, 8, 10	Workbook 2C Review 1 k Fully-worked solutions: Review 1 in Workbook 2C	Pages 115-116
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