

## AUTUMN TERM DISCOVERING MATHS 7A 2021-22

### 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 access 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.

Students are encouraged to ask questions and investigate their own ideas to improve their problem solving skills as well as gain a deeper understanding of mathematical concepts.

## MON 13<sup>TH</sup> SEPT


## Kerboodle – Book 1A

Autumn term / Week 1	<b>Chapter 1 Adding and Subtracting Whole Numbers</b>			<ul style="list-style-type: none"> <li><b>k</b> Chapter 1 introduction video</li> <li><b>k</b> Chapter 1 online skills test</li> <li><b>k</b> Chapter 1 end of chapter test and mark scheme</li> <li><b>k</b> Fully-worked solutions: Chapter 1 in Workbook 1A</li> </ul>	Pages 5-9
	1.1 Place Values and Order of Numbers	<ul style="list-style-type: none"> <li>• State the place values of the digits in whole numbers</li> <li>• Order and compare whole numbers</li> </ul>	DF1, 2, 5, 7 RM1, 5 SP1-4 N1, 2, 12	Workbook 1A Section 1.1 <ul style="list-style-type: none"> <li><b>k</b> Try It! video 1</li> </ul>	


## MON 20<sup>th</sup> SEPT

Autumn term / Week 2	1.2 Addition	<ul style="list-style-type: none"> <li>• Add whole numbers, using different methods</li> <li>• Use addition to solve real life problems</li> </ul>	DF2, 5, 7 RM1, 5 SP1-4 N4, 12	Workbook 1A Section 1.2 <ul style="list-style-type: none"> <li><b>k</b> Try It! video 6</li> </ul>	Pages 10-14
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**MON 27<sup>TH</sup> SEPT**

Autumn term / Week 3	1.3 Subtraction	<ul style="list-style-type: none"> <li>Subtract whole, numbers, using different methods</li> <li>Use subtraction to solve real-life problems</li> <li>Recognise and use the inverse relationship between addition and subtraction</li> </ul>	DF2, 5, 7 RM1, 5 SP1-4 N4, 6, 12	Workbook 1A Section 1.3  Try It! videos 7, 9	<b>Pages 21-20</b>


**MON 4<sup>TH</sup> OCT**

Autumn term / Week 4	1.4 Efficient Addition and Subtraction by Hand	<ul style="list-style-type: none"> <li>Add and subtract whole numbers using mental methods, using different methods</li> </ul>	DF2, 5, 7 RM1, 5 SP1-4 N4, 12	Workbook 1A Section 1.4  Try It! video 13	<b>Pages 21-26</b>
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**MON 11<sup>TH</sup> OCT**


Autumn term / Week 5	<b>Chapter 2 Multiplying and Dividing Whole Numbers</b>			 Chapter 2 introduction video  Chapter 2 online skills test  Chapter 2 end of chapter test and mark scheme  Fully-worked solutions: Chapter 2 in Workbook 1A	<b>Pages 32-33</b>
	2.1 Multiplication	<ul style="list-style-type: none"> <li>Multiply whole numbers, using different methods and techniques</li> <li>Use multiplication to solve real-life problems</li> <li>Calculate square and cube numbers and write these numbers using indices</li> </ul>	DF1, 2, 5, 7 RM1, 5 SP1-4 N4, 6, 7, 12, 15	Workbook 1A Section 2.1  Try It! videos 4, 7	

**MON 18<sup>TH</sup> OCT**


Autumn term / Week 6	2.2 Division	<ul style="list-style-type: none"> <li>Divide whole numbers, using different methods and techniques</li> <li>Recognise the inverse relationship between multiplication and division</li> <li>Use division to solve real life problems</li> </ul>	DF2, 5, 7 RM1, 5 SP1-4 N4, 6, 12	Workbook 1A Section 2.2  Try It! video 12	<b>Pages 45-54</b>
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**SAT 23<sup>RD</sup> OCT-SUN 31<sup>ST</sup> OCT HALF TERM**

**MON 1<sup>ST</sup> NOV**

Autumn term / Week 7	2.3 Multiplying and Dividing Efficiently Without a Calculator	<ul style="list-style-type: none"> <li>Multiply and divide whole numbers, using different methods and techniques</li> </ul>	DF2, 5, 7 RM1, 5 SP1-4 N4, 6, 12	Workbook 1A Section 2.3  Try It! videos 14, 18	<b>Pages 55-60</b>
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**MON 8<sup>TH</sup> NOV**

Autumn term / Week 8	2.4 Factors, Multiples and Prime Numbers	<ul style="list-style-type: none"> <li>List factors, common factors and find highest common factors</li> <li>List multiples, common multiples and find lowest common multiples</li> <li>List primes and prime factors</li> </ul>	DF2, 7 RM1, 5 SP1-4 N3, 12	Workbook 1A Section 2.4  Try It! videos 20, 22, 24	<b>Pages 61-65</b>
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**MON 15<sup>TH</sup> NOV**

Autumn term / Week 9	<b>Chapter 3 Calculation</b>			<ul style="list-style-type: none"> <li><b>k</b> Chapter 3 introduction video</li> <li><b>k</b> Chapter 3 online skills test</li> <li><b>k</b> Chapter 3 end of chapter test and mark scheme</li> <li><b>k</b> Fully-worked solutions: Chapter 3 in Workbook 1A</li> </ul>	<b>Pages</b>  <b>71-74</b>  <b>75-78</b>
	3.1 Rounding Numbers	• Round numbers to the nearest 10, 100, 1000 or 10000	DF2, 5, 7 RM1, 5 SP1-4 N2, 12, 13	Workbook 1A Section 3.1 <b>k</b> Try It! video 2	
	3.2 Estimation	• Estimate answers to calculations	DF2, 7 RM1, 5 SP1-4 N12, 13, 14	Workbook 1A Section 3.2 <b>k</b> Try It! video 5	

**MON 22<sup>ND</sup> NOV**

Autumn term / Week 10	3.3 Order of Operations	• Use the order of operations	DF1, 2, 7 RM1, 5, 6 SP1-4 N4, 5, 7, 12	Workbook 1A Section 3.3 <b>k</b> Try It! videos 8, 12, 14	<b>Pages</b> <b>79-84</b>  <b>85-88</b>
	3.4 Using a Calculator	• Use a calculator	DF2, 7 RM1, 5 SP1-4 N4, 5, 7, 12, 13, 14, 15	Workbook 1A Section 3.4	

**MON 29<sup>TH</sup> NOV**

Autumn term / Week 11	<b>Chapter 4 Use of Letters</b>			<ul style="list-style-type: none"> <li><b>k</b> Chapter 4 introduction video</li> <li><b>k</b> Chapter 4 online skills test</li> <li><b>k</b> Chapter 4 end of chapter test and mark scheme</li> <li><b>k</b> Fully-worked solutions: Chapter 4 in Workbook 1A</li> </ul>	<b>Pages</b> <b>93-98</b>
	4.1 Using Letters to Represent Numbers	• Use letters to represent numbers	DF2, 3, 5, 7 RM1, 3, 5 SP1-4 N12 A1, 3, 6, 10	Workbook 1A Section 4.1 <b>k</b> Try It! videos 2, 4	
Autumn term / Week 10	3.4 Like Terms and Unlike Terms	• Simplify expressions by collecting like terms	DF2, 3, 4, 7 RM3, 5 SP1-4 N12 A1, 2, 3, 4	Workbook 1B Section 3.4 <b>k</b> Try It! video 18	<b>Pages</b> <b>78-84</b>  <b>BOOK</b> <b>7B</b>  <b>85-89</b>
	3.5 Addition and Subtraction of Linear Expressions	• Add and subtract linear expressions	DF2, 3, 4, 7 RM3, 5 SP1-4 N12 A1, 2, 3, 4	Workbook 1B Section 3.5 <b>k</b> Try It! videos 20, 21, 22	

**MON 6<sup>TH</sup> DEC**

Autumn term / Week 12	4.2 Substitution of Numbers for Letters	• Substitute numbers for letters	DF2, 3, 4, 7 RM1, 3, 5 SP1-4 N12 A1, 2, 3, 6, 10	Workbook 1A Section 4.2 <b>k</b> Try It! video 6	<b>Pages</b> <b>99-101</b>
	<b>Review and assessment:</b> Integrated Examples and Review Exercise 1		DF1, 2, 4, 7 RM1, 3, 5, 6 SP1-4 N1, 2, 3, 4, 5, 6, 7, 12, 13, 14 A1, 2, 6, 10	Workbook 1A Review 1 <b>k</b> Fully-worked solutions: Review 1 in Workbook 1A	

MON 13<sup>TH</sup> DEC

Autumn term / Week 9	3.2 Substituting Numbers for Letters	• Substitute integers into simple expressions and formulae	DF2, 3, 4, 7 RM1, 3, 5 SP1-4 N12 A1, 2, 3, 5	Workbook 1B Section 3.2 📺 Try It! video 9	<b>Pages 71-74 BOOK 7B</b>
	3.3 Writing Algebraic Expressions and Formulae	• Write simple expressions and formulae	DF2, 3, 4, 5, 7 RM1, 3, 5 SP1-4 N12 A1, 2, 3, 5, 6, 10	Workbook 1B Section 3.3	<b>75-77</b>