

## AUTUMN TERM DISCOVERY MATHS 2A YEAR 8 Kerboodle book 2A

### 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 6<sup>TH</sup> SEPT

Autumn term / Week 1	Chapter 1 Integers		Workbook 2A Chapter 1 <b>K</b> Chapter 1 introduction video <b>K</b> Chapter 1 online skills test <b>K</b> Chapter 1 end of chapter test and mark scheme <b>K</b> Fully-worked solutions: Chapter 1 in Workbook 2A	Pages
	1.1 Place Values <ul style="list-style-type: none"> <li>Read and write positive and negative integers</li> </ul>	DF7a RM1a SP1-4 N1, 4a	Workbook 2A Section 1.1	5-10
	1.2 Integers <ul style="list-style-type: none"> <li>Read and write positive and negative integers</li> <li>Use integers in real-world applications</li> </ul>	DF7a RM1a SP1-4 N1, 4a	Workbook 2A Section 1.2 <b>K</b> Try It! video 8	11-14

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

Autumn term / Week 2	1.3 Number Lines	<ul style="list-style-type: none"> <li>Use number lines with different scales to present and compare positive and negative integers</li> <li>Use the inequality symbols <math>&lt;</math>, <math>&gt;</math>, <math>\leq</math> and <math>\geq</math> to compare integers</li> </ul>	DF7a RM1a SP1-4 N2a, 2b, 2c, 4a	Workbook 2A Section 1.3 <b>k</b> Try It! videos 12, 14	<b>Pages 15-20</b>
	<b>Chapter 2 The Four Operations on Integers</b>			Workbook 2A Chapter 2 <b>k</b> Chapter 2 introduction video <b>k</b> Chapter 2 online skills test <b>k</b> Chapter 2 end of chapter test and mark scheme <b>k</b> Fully-worked solutions: Chapter 2 in Workbook 2A	
	2.1 Addition and Subtraction of Integers	<ul style="list-style-type: none"> <li>Add and subtract positive and negative integers</li> </ul>	DF7a SP1-4 N4a, 6	Workbook 2A Section 2.1 <b>k</b> Try It! videos 4, 8, 12	<b>29-39</b>

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

Autumn term / Week 3	2.2 Multiplication and Division of Integers	<ul style="list-style-type: none"> <li>Multiply and divide positive and negative integers</li> </ul>	DF7a SP1-4 N4a, 6	Workbook 2A Section 2.2 <b>k</b> Try It! videos 14, 17	<b>Pages 40-46</b>
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**MON 27<sup>th</sup> SEPT**

Autumn term / Week 4	2.3 Combined Operations on Integers	<ul style="list-style-type: none"> <li>Evaluate expressions using the order of operations</li> </ul>	DF7a SP1-4 N4a, 5a	Workbook 2A Section 2.3 <b>k</b> Try It! video 18	<b>Pages 47-48</b>
	2.4 Rounding to Certain Place Values	<ul style="list-style-type: none"> <li>Round numbers to required numbers of significant figures or to the nearest desired place values</li> <li>Estimate the results of calculations</li> </ul>	DF7a RM1a SP1-4 N1, 4a, 13a, 13c, 14a	Workbook 2A Section 2.4 <b>k</b> Try It! videos 20, 24	<b>49-55</b>

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

Autumn term / Week 5	2.5 Squares and Square Roots	<ul style="list-style-type: none"> <li>Calculate squares and square roots</li> </ul>	DF1, 7a RM1a SP1-4 N4a, 7a	Workbook 2A Section 2.5 <b>k</b> Try It! video 28	<b>Pages 56-59</b>
	2.6 Cubes and Cube Roots	<ul style="list-style-type: none"> <li>Calculate cubes and cube roots</li> </ul>	DF1, 7a RM1a SP1-4 N4a, 7a	Workbook 2A Section 2.6 <b>k</b> Try It! video 32	
	<b>Chapter 3 Fractions</b>			Workbook 2A Chapter 3 <b>k</b> Chapter 3 introduction video <b>k</b> Chapter 3 online skills test <b>k</b> Chapter 3 end of chapter test and mark scheme <b>k</b> Fully-worked solutions: Chapter 3 in Workbook	<b>60-63</b>
	3.1 Conversion between Improper Fractions and Mixed Numbers	<ul style="list-style-type: none"> <li>Convert improper fractions to mixed numbers</li> <li>Convert mixed numbers to improper fractions</li> </ul>	DF1 SP1-4 N4c	Workbook 2A Section 3.1 <b>k</b> Try It! videos 1, 3	

## MON 11th OCT

Autumn term / Week 6	3.2 Comparing Fractions	• Compare and order fractions using inequality symbols $<$ , $>$ , $\leq$ and $\geq$	DF1 SP1-4 N2a, 2c, 4c	Workbook 2A Section 3.2 📺 Try It! video 6	<b>Pages</b> <b>74-77</b>  <b>78-86</b>
	3.3 Addition and Subtraction of Fractions	• Add and subtract fractions	DF1 SP1-4 N4c R3	Workbook 2A Section 3.3 📺 Try It! video 15	

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

Autumn term / Week 7	3.4 Multiplication of Fractions	• Multiply fractions	DF1 SP1-4 N4c R3	Workbook 2A Section 3.4 📺 Try It! video 19	<b>Pages</b> <b>87-90</b>  <b>91-96</b>
	3.5 Division of Fractions	• Divide fractions	DF1 SP1-4 N4c R3	Workbook 2A Section 3.5 📺 Try It! video 21	

## HALF TERM SAT 23<sup>RD</sup> OCT – SUN 31<sup>ST</sup> OCT

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

Autumn term / Week 8	3.6 Combined Operations on Fractions	• Add, subtract, multiply and divide fractions	DF1 SP1-4 N4c, 5b R3	Workbook 2A Section 3.6 📺 Try It! video 27	<b>Pages</b> <b>97-99</b>  <b>106-108</b>  <b>109-112</b>
	<b>Chapter 4 Decimals</b>			Workbook 2A Chapter 4 📺 Chapter 4 introduction video 📺 Chapter 4 online skills test 📺 Chapter 4 end of chapter test and mark sheet 📺 Fully-worked solutions: Chapter 4 in Workbook	
	4.1 Place Values of Decimals	• Identify the place values of digits in decimals	DF1 SP1-4 N1, 4b	Workbook 2A Section 4.1	
	4.2 Conversion between Fractions and Decimals	• Convert between fractions and decimals	DF1, 5 SP1-4 N1, 15	Workbook 2A Section 4.2 📺 Try It! video 6	

## MON 8<sup>TH</sup> NOV

Autumn term / Week 9	4.3 Comparing Fractions and Decimals	• Compare fractions and decimals	DF1, 5 SP1-4 N2a, 2c, 4b	Workbook 2A Section 4.3 📺 Try It! video 7	<b>Pages</b> <b>113-115</b>  <b>116-120</b>
	4.4 Rounding Decimals	• Round decimals to a given number of decimal places • Round decimals to a given number of significant figures	DF1 SP1-4 N1, 4b, 13b, 13c	Workbook 2A Section 4.4 📺 Try It! videos 10, 12	

## MON 15<sup>TH</sup> NOV/MON 22<sup>ND</sup> Nov

Autumn term / Week 10	4.5 Addition and Subtraction of Decimals	• Add and subtract decimals	DF1, 4c SP1-4 N1, 4b	Workbook 2A Section 4.5 📺 Try It! video 17	<b>Pages</b> <b>121-124</b>  <b>125-129</b>
	4.6 Multiplication of Decimals	• Multiply decimals	DF1, 4c SP1-4 N1, 4b	Workbook 2A Section 4.6 📺 Try It! video 20	
Autumn term / Week 11	4.7 Division of Decimals	• Divide decimals	DF1, 4c SP1-4 N1, 4b	Workbook 2A Section 4.7 📺 Try It! video 25	<b>130-135</b>

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

Autumn term / Week 12	4.8 Combined Operations on Decimals	• Add, subtract, multiply and divide decimals	DF1, 4c SP1-4 N1, 4b	Workbook 2A Section 4.8 📺 Try It! video 32	<b>Pages</b> <b>136-138</b>
	<b>Review and assessment:</b> Integrated Examples and Review Exercise 1		DF1, 2, 5, 7a SP1-4 N1, 2a, 2b, 2c, 4a R3	Workbook 2A Review 1 📺 Fully-worked solutions: Review 1 in Workbook	

## SAT 18<sup>TH</sup> DEC-MON 3<sup>RD</sup> JAN XMAS HOLIDAY