

## SUMMER TERM DISCOVERING MATHS 2C YEAR 8 2022

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.

## WEDS 20TH APRIL


Summer term / Week 1	<b>Problem-solving Processes and Heuristics</b>	DF2, 3, 4, 5, 7 RM3, 4, 5, 6 SP1-4 N4, 5 A1, 2, 3, 4, 6, 7		
	<b>Chapter 9 Angles in Quadrilaterals and Polygons</b>		Workbook 2C Chapter 9  Chapter 9 introduction video  Chapter 9 online skills test  Chapter 9 end-of-chapter test and mark scheme  Fully-worked solutions: Chapter 9 in Workbook 2C	

Summer term / Week 1	9.1 Quadrilaterals	<ul style="list-style-type: none"> <li>classify special quadrilaterals on the basis of their properties</li> <li>recognise the properties of special quadrilaterals</li> </ul>	DF2, 7 RM5 SP1-4 N12 G5, 7, 10, 11, 12, 16	 Try It! Videos 2, 3, 4	1102
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**244-253**

## MON

## 25TH APRIL

Summer term / Week 2	9.2 Polygons	<ul style="list-style-type: none"> <li>recognise the properties of polygons, including symmetry properties</li> </ul>	DF2, 4, 7 RM4, 5 SP1-4 N12 A2 G5, 7, 10, 11, 12, 16	 Try It! Videos 6, 9, 11	1100, 1320
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253-361

## TUES 3<sup>RD</sup> MAY

Summer term / Week 3	Chapter 10 Perimeter and Area of Parallelograms and Trapezia			Workbook 2C Chapter 10 <b>k</b> Chapter 10 introduction video <b>k</b> Chapter 10 online skills test <b>k</b> Chapter 10 end-of-chapter test and mark scheme <b>k</b> Fully-worked solutions: Chapter 10 in Workbook 2C	
	10.1 Area of Parallelograms	• calculate the area of a parallelogram	DF2, 4, 7 RM4, 5 SP1-4 N12 A2 G1, 16	<b>k</b> Try It! Video 2	1108
	10.2 Area of Trapezia	• calculate the area of a trapezium	DF2, 4, 7 RM4, 5 SP1-4 N12 A2 G1, 16	<b>k</b> Try It! Video 6	1128

**266-278**

## MON 9<sup>TH</sup> MAY

Summer term / Week 4	10.3 Perimeter and Area of Composite Plane Figures	• solve problems involving perimeters and areas of composite plane figures	DF2, 4, 7 RM5 SP1-4 N12, 13, 15 A2 G1, 2, 6, 16	<b>k</b> Try It! Video 9	
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**278-284**

## MON 16<sup>TH</sup> MAY

Summer term / Week 5	Chapter 11 Volume and Surface Area of Prisms and Cylinders			Workbook 2C Chapter 11 <b>k</b> Chapter 11 introduction video <b>k</b> Chapter 11 online skills test <b>k</b> Chapter 11 end-of-chapter test and mark scheme <b>k</b> Fully-worked solutions: Chapter 11 in Workbook 2C	
	11.1 Views and Nets of Three-dimensional (3D) Shapes	• visualise and draw sketches of three-dimensional shapes from different views • visualise and draw the nets of prisms and cylinders	DF2, 7 RM5 SP1-4 N12 G15		1098, 1106

**289-295**

## MON 23<sup>RD</sup> MAY

Summer term / Week 6	11.2 Volume and Total Surface Area of Prisms	• calculate the volume and surface area of prisms	DF2, 4, 7 RM4, 5 SP1-4 N12 A2 G1, 2, 6, 15, 16	<b>k</b> Try It! Videos 3, 5, 6	1107, 1139
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**295-303**

## HALF TERM SAT 28<sup>TH</sup> MAY-SUN 5<sup>TH</sup> JUNE

### MON 6<sup>TH</sup> JUNE

Summer term / Week 7	11.3 Volume and Total Surface Area of Cylinders	• calculate the volume and surface area of cylinders	DF2, 4, 7 RM4, 5 SP1-4 N12, 13, 15 A2 G1, 2, 15, 16	<b>k</b> Try It! Videos 8, 9, 11	1107, 1138
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**303-310**

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

Summer term / Week 8	11.4 Volume and Surface Area of Composite Solids	<ul style="list-style-type: none"> <li>convert between <math>\text{cm}^2</math> and <math>\text{m}^2</math>, and between <math>\text{cm}^3</math> and <math>\text{m}^3</math></li> <li>solve problems involving volume and surface area of composite solids</li> </ul>	DF2, 4, 7 RM5 SP1-4 N12, 13, 15 A2 R1 G1, 2, 6, 15, 16	<ul style="list-style-type: none"> <li>Try It! Videos 13, 14, 15</li> </ul>	1138, 1139
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310-318

## MON 20<sup>TH</sup> JUNE

Summer term / Week 9	<b>Chapter 12 Statistical Graphs</b>			Workbook 2C Chapter 12 <ul style="list-style-type: none"> <li>Chapter 12 introduction video</li> <li>Chapter 12 online skills test</li> <li>Chapter 12 end-of-chapter test and mark scheme</li> <li>Fully-worked solutions: Chapter 12 in Workbook 2C</li> </ul>	
	12.1 Line Graphs	<ul style="list-style-type: none"> <li>construct, analyse and interpret line graphs</li> </ul>	DF2, 7 SP1-4 N12 S1, 2	<ul style="list-style-type: none"> <li>Try It! Video 2</li> </ul>	6018
	12.2 Pie Charts	<ul style="list-style-type: none"> <li>construct, analyse and interpret pie charts</li> </ul>	DF2, 7 SP1-4 N12 G3 S2	<ul style="list-style-type: none"> <li>Try It! Video 5</li> </ul>	1207

323-335

## MON 27<sup>TH</sup> JUNE

Summer term / Week 10	12.3 Use and Misuse of Statistical Graphs	<ul style="list-style-type: none"> <li>describe the purposes and appropriateness of use of the different forms of statistical representation, including pictograms and bar charts</li> <li>explain why a given statistical diagram can lead to misinterpretation of data</li> </ul>	DF2, 7 RM4, 7 SP1-4 N12 S2		1251
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335-347

## MON 4<sup>TH</sup> JULY

Summer term / Week 11	12.4 Scatter Graphs	<ul style="list-style-type: none"> <li>construct, analyse and interpret scatter graphs</li> <li>describe types of correlation for a scatter graph</li> <li>draw a line of best fit on a scatter graph and use it to estimate data values</li> <li>find the equation of a given line of best fit</li> <li>identify and explain outliers</li> </ul>	DF2, 7 RM3 SP1-4 N12 S1, 3	<ul style="list-style-type: none"> <li>Try It! Video 11</li> </ul>	1213
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347-356

## MON 11<sup>TH</sup> JULY

Term / Week	Chapter/Chapter Section	Learning Objectives	KS3 Programme of Study Reference	Series Resources (in addition to Student Book 2C)	MyMaths Codes
Summer term / Week 12	<b>Review and assessment:</b> Review Exercise 3		DF2, 7 SP1-4 N12, 13, 15 A2 R1, 8, 10 G1, 2, 7, 12, 15, 16 S1, 2, 3	Workbook 2C Review 3 <ul style="list-style-type: none"> <li>Fully-worked solutions: Review 3 in Workbook 2C</li> </ul>	
	<b>Problems in Real-world Contexts</b>		DF2, 6, 7 RM1, 3, 7 SP1-4 N12, 13 A8, 10, 11 R1, 8, 10 G1, 2 S1, 2, 3		

360-367

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