



Year 8 Maths Topic Overview



Topics	DFM Key Skills	%
1. Number		
1.1 Calculations - adding and subtracting including decimals, estimating	74, 125, 188	
1.2 Divisibility and division	163	
1.3 Calculating with negative integers	87, 155, 156	
1.4 Powers and roots	88, 157	
1.5 Powers, roots and brackets	88, 157, 158	
1.6 Multiples and factors - including HCF and LCM	161, 162	
1.7 Simplifying surds	335	
2. Area and volume		
2.1 Area of a triangle and compound shapes	138, 140, 182	
2.2 Area of a parallelogram and trapezium	139, 184	
2.3 Volume of cubes and cuboids	145	
2.4 2D representations of 3D solids	228	
2.5 Surface area of cubes and cuboids	232	
2.6 Measures - converting between units of length, area and volume	174, 246	
2.7 Area and circumference of circles	209, 210, 211	
3. Statistics, graphs and charts		
3.1 Pie charts	246	
3.2 Using tables - two-way tables, averages from frequency tables	235, 236, 237, 238	
3.3 Stem and leaf diagrams	240	
3.4 Comparing data	132, 207, 403	
3.5 Scatter graphs	244	
3.6 Misleading graphs	K317f	
3.7 Cumulative frequency and box plots	398, 399	
4. Expressions and equations		
4.1 Algebraic powers	191, 192, 193	
4.2 Expressions and brackets - expanding single and double brackets	252, 300	
4.3 Factorising expressions - factorising single and double brackets	253, 363, 364	
4.4 One-step equations	199	
4.5 Two-step equations	199	
4.6 The balancing method	199	
4.7 Inequalities	310, 340	
5. Straight-line graphs (actually chapter 9)		
9.2 Gradients	271	
9.1 Direct proportion on graphs	269	
9.3 Equations of straight lines	269, 272, 273, 274	
9.4 Parallel lines	275	
6. Decimals and ratio		
6.1 Ordering decimals and rounding	69, 75, 187	
6.2 Place-value calculations	69, 70, 123	
6.3 Calculations with decimals	67, 70, 123, 125	
6.4 Ratio and proportion with decimals	224	
7. Lines and angles		
7.1 Quadrilaterals	77	
7.2 Alternate angles and proof	263	
7.3 Angles in parallel lines	263	
7.4 Exterior and interior angles	262	
7.5 Solving geometric problems	262, 263	
8. Calculating with fractions		
8.1 Ordering fractions	175	
8.2 Adding and subtracting fractions	56	
8.3 Multiplying fractions	165	
8.4 Dividing fractions	121, 166	
8.5 Calculating with mixed numbers	101, 118, 167, 168	

9. Real-life graphs (actually chapter 5)		
5.1 Conversion graphs	178	
5.2 Distance-time graphs	149	
5.3 Line graphs	114	
5.4 More line graphs	114	
5.5 Real-life graphs	114, 328	
5.6 Curved graphs	n/a	
10. Percentages, decimals and fractions		
10.1 Fractions and decimals	172, 175	
10.2 Equivalent proportions	K98c	
10.3 Writing percentages	214	
10.4 Percentages of amounts	215, 219, 220, 221, 223	
10.5 Compound interest	360, 362	
Y9 Ch1. Indices and standard form		
1.1 Indices	88	
1.2 Calculations and estimates	188	
1.3 More indices	158, 299	
1.4 Standard form	302, 303	
1.5 Surds	336, 337	

Set yourself up for success with assessments...	
Chapter Assessments	End of Term/Year Assessments
Check up booklet Complete the booklet first, showing full workings. Go through the worked solutions to check your answers. Use the front cover to guide your next steps.	Topic list Identify areas to improve using the topic list. Start practising Key Skills on DFM.
Strengthen/Extend Choose a topic from your check-up booklet to focus on first. Practise the skills, ensuring clear, step-by-step workings. Identify any weak areas for further revision at home.	Key Skills HW on DFM Two weeks before the test. Workings shown neatly in your book.
	Pre-test and other resources given by teacher Use pre-test and other resources from your teacher. Revise these topics using DFM numbers and QR code resources.
Test corrections (Really important to improve exam technique) Use worked/video solutions to correct mistakes in green pen. Ask your teacher if you still don't understand a question.	
DFM key skills Identify at least three Key Skills to practise from your review sheet. Write them neatly in the front of your exercise book with full workings. Complete 10 practice questions for each Key Skill. If you have mastered the basics, use Exam Skills to extend your learning.	

General Revision Tips
Plan Your Revision: Create a timetable and stick to it - short, focused sessions work best. Use DFM - Key skill numbers from pre-tests, topic lists etc tell you exactly what to work on. Use Exam Style Questions: Practise under timed conditions and check your answers with mark schemes to identify gaps to prioritise. Mix Up Revision Methods: Use flashcards, mind maps, and online quizzes (e.g. Corbett Maths, DrFrostMaths). Understand, Don't Just Memorise: Make sure you can explain why a method works, not just how to do it. Show Full Workings: Even if your final answer is wrong, you can still gain marks for correct steps. Target Weak Areas: Spend extra time on the topics you find hardest rather than just repeating the ones you're comfortable with. Use Active Recall: Cover up answers and test yourself instead of just reading through notes. Stay Consistent: Little and often is better than last-minute cramming!

Additional Resources
Worksheets on Sharepoint These include most of the topics covered in the year. They each have three levels of difficulty (support, core and then depth) and the answers are at the end of the document.

Corbett Maths Here you can find worksheets filtered by topic as well as written and video solutions

Dr Frost Use the Dr Frost numbers to the left to complete questions on these topics. You can change the difficulty and you can complete past paper questions on here too.

MathsGenie Another place where you can find worksheets filtered by topic as well as written and video solutions
