Year 9 Maths Topic Overview

Topics	DFM Key Skills	%
2. Expressions and formulae		
2.1 Solving equations	257, 258	
2.2 Substituting into expressions	136, 196	
2.3 Writing and using formulae	198	
2.4 Using and rearranging formulae	201	
2.5 Index laws and brackets	191, 192, 252	
2.6 Expanding double brackets	300	
2.7 Factorise simple quadratics (not in text book)	253, 363	
2.8 Intro to completing the square (not in text book)	413a	
4. Multiplicative reasoning		
4.1 Enlargement	295, 296	
4.2 Negative and fractional scale factors	298	
4.3 Percentage change	215, 223	
4.4 Compound measures	326, 329	
4.5 Direct and inverse proportion	176	
5. Constructions		
5.1 Using scales	284	
5.2 Basic constructions	285	
5.3 Constructing triangles	285	
5.4 Using accurate scale diagrams	228	
6. Sequences, inequalities, equations and proportion		
6.1 nth term of arithmetic sequences	203, 204, 205	
6.2 Non-linear sequences	371	
6.3 Inequalities	310	
6.4 Solving equations	340	
6.4.5 Solving simultaneous equations	277	
6.5 Proportion	387	
7. Circles, Pythagoras and prisms		
7.1 Circumference of a circle	209, 212, 319	
7.2 Area of a circle	210, 211, 320, 324	
7.3 Pythagoras' theorem	289	
7.4 Prisms and cylinders	231-234	
7.5 Errors and bounds	311	
8. Graphs		
8.1 Using y = mx + c	274	
8.2 More straight-line graphs	275	
8.3 Simultaneous equations	410	
8.4 Graphs of quadratic functions	367	
8.5 More non-linear graphs	367	
9. Probability		
9.1 Mutually exclusive events	248, 250	
9.2 Experimental and theoretical probability	251	
9.3 Sample space diagrams	249	
9.4 Two-way tables	238	
9.5 Venn diagrams	242, 356	
9.6 Probability Trees (not in text book)	353b,d,e	
10. Comparing shapes		
10.1 Congruent and similar shapes	471	
10.2 Ratios in triangles	293	
10.3 The tangent ratio	322, 323	
10.4 The sine ratio	322, 323	
10.5 The cosine ratio	322, 323	
10.6 Using trigonometry to find angles	322, 323	
10.7 Use trigonometry to solve multi-step problems	322, 323	

Y10 Ch1. Number		
Number problems	37, 74, 75, 123, 125, 187	
Estimating	188	
HCF and LCM	53, 97, 161, 162	
Calculating with powers	136	
Zero, negative and fractional indices	191, 192, 196	
Standard form	302, 303, 304, 305	
Surds	335	
Y10 Ch3. Interpreting and representing data		
Statistical diagrams 1	238, 240	
Time series	400	
Scatter graphs	244	
Line of best fit	244	
Averages and range	132-134, 207	
Statistical diagrams 2	235, 236, 65, 246, 316	
Y10 Ch4. Fractions, Ratios and Percentages		
Fractions	29, 56, 101, 118, 165, 166	
Ratio and proportion	176, 177, 224, 225	
Percentages	130, 172, 215, 219, 220, 221, 223	
Fractions, decimals and percentages	172, 173	

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