

Key Stage 3 Maths – Scheme of Work & Homework Expectations

We follow the **Pearson Maths Progress** course for Key Stage 3. This structured curriculum ensures students build a strong foundation in mathematical concepts and skills.

Homework via Sparx Maths

- **Platform:** Sparx Maths Homework – an online system that creates **personalised homework** based on what has been taught in class.
- **Schedule:**
 - Homework is **set every Wednesday at 16:00**
 - Deadline for completion is the **following Tuesday at 20:00**
- **Duration:** Students are expected to spend **approximately one hour** on their homework each week.
- **Support:**
 - Each question includes a **short help video**.
 - If further help is needed, students are encouraged to **ask a teacher**.
- **Homework Books:**
 - All students have been issued a **homework book**.
 - They are encouraged to **write their answers and workings** in this book.

Expectations

- Students are expected to **complete all homework and aim for 100% accuracy**.
- Teachers select topics based on classroom teaching, and Sparx adapts the questions to each student's level.

Assessment & Feedback

- At the **end of each unit**, students will sit a **topic test**.
- **Feedback** from these tests will be **stuck into their homework books**.
- Students are encouraged to use this feedback for **independent revision**, especially on topics they found challenging.

Y7 Mathematics Scheme of Work (Topics)

1 Analysing and displaying data	RAG	End of unit 5 test	RAG
1.1 Mode, median and range		6 Probability	
1.2 Displaying data		6.1 The language of Probability	
1.3 Grouping data		6.2 Calculating probability	
1.4 Averages and comparing data		6.3 More probability	
1.5 Line graphs and more bar charts		6.4 Experimental Probability	
End of unit 1 test		6.5 Expected outcomes	
2 Number skills		End of unit 6 test	
2.1 Mental maths		7 Ratio and Proportion	
2.2 Addition and subtraction		7.1 Direct proportion	
2.3 Multiplication		7.2 Writing ratios	
2.4 Division		7.3 Using ratios	
2.5 Money and time		7.4 Ratios, proportions and fractions	
2.6 Negative numbers		7.5 Proportions And percentages	
2.7 Factors, multiples and primes		Unit 5- 7 Assessment	
2.8 Square numbers		8 lines and Angles	
End of unit 2 test		8.1 Measuring and drawing angles	
3 Expressions, functions and formulae		8.2 Lines, angles and triangles	
3.1 Functions		8.3 Drawing triangles accurately	
3.2 Simplifying expressions 1		8.4 Calculating angles	
3.3 Simplifying expressions 2		8.5 Angles in a triangle	
3.4 Writing expressions		8.6 Quadrilaterals	
3.5 Substituting into formulae		End of unit 8 test	
3.6 Writing formulae			
End of unit 3 test			
4 Decimals and measures			
4.1 decimals and rounding		End of Year Test all units.	
4.2 length, mass and capacity			
4.3 scales and measures			
4.4 working with decimals mentally			
4.5 working with decimals			
4.6 perimeter			
4.7 area			
4.8 more units of measure			
Unit 1-4 Assessment			
5 Fractions and percentages			
5.1 comparing fractions			
5.2 simplifying fractions			
5.3 working with fractions			
5.4 fractions and decimals			
5.5 understanding percentages			
5.6 percentages of amounts			

Y8 Mathematics Scheme of Work (Topics)

Unit 1 Number skills	RAG	Unit 6 Decimals and ratio	RAG
1.1 Calculations		6.1 Ordering decimals	
1.2 Divisibility and division		6.2 Place value calculation	
1.3 Calculating with negative numbers		6.3 Calculations with decimals	
1.4 Powers and roots		6.4 Ratio and proportion with decimals	
1.5 Powers, roots and brackets		End of unit 6 test	
1.6 More powers, multiples and roots		Unit 7 Lines and angles	
End of unit 1 test		7.1 Quadrilaterals	
Unit 2 Area and volume		7.2 Alternate angles and proof	
2.1 Area of a triangle		7.3 Angles in parallel lines	
2.2 Area of a parallelogram and trapezium		7.4 Exterior and interior angles	
2.3 Volumes of cubes and cuboids		7.5 Solving geometric problems	
2.4 Representations of 3D solids		unit 5 – 7 Assessment	
2.5 Surface area of cubes and cuboids		Unit 8 Calculating with fractions	
2.6 Measures		8.1 Ordering fractions	
End of unit 2 test		8.2 Adding and subtracting fractions	
Unit 3 Statistics, graphs and charts		8.3 Multiplying fractions	
3.1 Pie charts		8.4 Dividing fractions	
3.2 Using tables		8.5 Calculating with mixed numbers	
3.3 Stem and leaf diagrams		End of unit 8 test	
3.4 Comparing data			
3.5 Scatter graphs		End of Year Test all units.	
3.6 Misleading graphs			
End of unit 3 test			
Unit 4 Expressions and equations			
4.1 Algebraic powers			
4.2 Expressions and brackets			
4.3 Factorising expressions			
4.4 One step equations			
4.5 Two step equations			
4.6 The balancing method			
Units 1 – 4 Assessment			
Unit 5 Real life graphs			
5.1 Conversion graphs			
5.2 Distance – time graphs			
5.3 Line graphs			
5.4 more line graphs			
5.5 real life graphs			
5.6 curved graphs			
End of unit 5 test			

Y9 Mathematics Scheme of Work (Topics)

Unit 1 Indices and standard form	RAG	Unit 6 Sequences, inequalities, equations and proportion	RAG
1.1 Indices		6.1 nth term of arithmetic sequences	
1.2 Calculations and estimates		6.2 Non-linear sequences	
1.3 More indices		6.3 Inequalities	
1.4 Standard form		6.4 Solving equations	
Unit 1 Test		6.5 Proportion	
Unit 2 Expressions and formulae		Unit 6 Test	
2.1 Solving equations		Unit 7 Circles, Pythagoras and prisms	
2.2 Substituting into expressions		7.1 Circumference of a circle	
2.3 Writing and using formulae		7.2 Area of a circle	
2.4 Using and rearranging formulae		7.3 Pythagoras' theorem	
2.5 Index laws and brackets		7.4 Prisms and cylinders	
2.6 Expanding double brackets		7.5 Errors and bounds	
Unit 2 Test		Unit 5- 7 Assessment	
Unit 3 Dealing with data		Unit 8 Graphs	
3.1 Planning a survey		8.1 Using $y = mx + c$	
3.2 Collecting data		8.2 More straight-line graphs	
3.3 Calculating averages		8.3 Simultaneous equations	
3.4 Displaying and analysing data		8.4 More non-linear graphs	
3.5 Presenting and comparing data		8.5 More non-linear graphs	
Unit 3 Test		Unit 8 Test	
Unit 4 Multiplicative reasoning			
4.1 Enlargement		End of year test	
4.2 Negative and fractional scale factors			
4.3 Percentage change			
4.4 Compound measures			
4.5 Direct and inverse proportion			
Unit 1- 4 Assessment			
Unit 5 Constructions			
5.1 Using scales			
5.2 Basic constructions			
5.3 Constructing triangles			
5.4 Using accurate scale diagrams			
Unit 5 Test			