KS3 Year 8
Schemes of Work

This is a breakdown of the Year 8 Mathematics content.
To watch videos, take notes, and attempt questions on any topic:
1. *Go to https://vle.mathswatch.co.uk/vle/*
2. *Log in using your personalised username and password*
3. *Click on "Video" in the top menu bar*
4. *Enter the MathsWatch clip number (as listed in the table below) into the search bar*
5. *Watch the video or click the yellow "Interactive Questions" button to attempt questions*

TOPICS	MATHSWATCH CLIP NUMBERS	COMPLETED
UNIT 1 (Number)		
Mental Arithmetic	N3a, N4a, N2a	
Calculations - Add and Subtract	N3b, N4b, N13a, N14a	
Calculations - Multiplication	N5, N15a, N17a, N17b, N28a	
Calculations - Division	N6, N16, N29a	
Estimation	N43a, N43b	
Negative numbers – add and subtract	N18, N19a	
Negative numbers – multiply and divide	N19b	
Negative numbers - Directed Numbers	N18, N19	
Squares, cubes and roots	N25	
BIDMAS	N20	
HCF and LCM Listing	N10, N11, N31a, N31b	
Prime Factor Decomposition	N30a, N30b	
Using a calculator	N22b, N44	
UNIT 2 (Area and Volume)		
Area of Squares and Triangles	G9, G20a, G20c, G24	
Area of Parallelograms and Trapezium	G20b, G20d	
Volume of cubes and cuboids	G21a	
Properties of 3D shapes and Drawing Nets	G12a, G12b, G12c	
Isometric Drawings and plans and elevations		
Surface Area of prisms	G21b, G25b	
Converting Metric Units	N1c, N7a, R2	
Converting Imperial Units		
ASSESSMENT 1 – NUMBER, AREA AND VOLUME		
UNIT 3 (Statistics, Graphs and Charts)		
Drawing/ measuring angles	G10a, G10b, G10c	
Interpreting pie charts	S9	
Drawing pie charts	S9	
Averages	S6, S7	
Averages from simple frequency tables	S3	
Grouped frequency tables	S4, S10a, S10b	
Two-way tables	P4, P5	
Stem and leaf diagrams		
Back-to-back stem and leaf diagrams		
Comparing averages	S8	
Drawing Scatter graphs	S8	
Correlation and Line of best fit	S8	
Misleading graphs		
UNIT 4 (Expressions and Equations)		
Simplifying Expressions (Add and subtract)	A6,	
Simplifying Expressions (Multiply and divide)	A7a, A7b	
Writing Expressions	A2, A3, A4	
Expanding brackets and simplify	A8, A18	
Factorising expressions	A9	

Substitution	A10	
Solving one step equations	A12, A17	
Solving two step equations	A17	
Solving Equations with fractions and brackets	A19a, A19b	
Forming and solving equations	A17	
ASSESSMENT 2 – DATA, EXPRESSIONS AND EQUATIONS		
UNIT 6 (Decimals and Ratio)		
Ordering Decimals	N1b, N2b	
Rounding numbers	N27a, N27b	
Significant figures	N38	
Multiplying Decimals	N15b, N28b, N40a	
Dividing Decimals	N29b, N40b	
Simplifying ratios	R1a, R1b, R5a	
Quantities from a ratio and Unit Conversions	R2	
Sharing Ratios	R5b	
UNIT 7 (Lines and Angles)		
Properties of triangles and quadrilaterals	G14, G16, G17	
Angles on a line/point/ vertically opposite	G13	
Angles in parallel lines	G18	
Angles in polygons – interior		
Angles in polygons – exterior angles		
ASSESSMENT 3 – DECIMALS, RATIO, LINES AND ANGLES		
UNIT 8 (Calculating with Fractions)		
Comparing fractions	N34	
Simplifying and equivalent fractions	N23a, N23b, N23c, N35	
Adding and subtracting fractions	N36, N41	
Multiplying fractions	N33, N37a, N42a, N42b	
Dividing fractions	N37b	
Calculating with Mixed numbers		
UNIT 10 (Percentages, decimals and fractions)		
FDP	N32, N39a, N39b	
Terminating and recurring decimals		
Equivalent proportions	R3	
Percentages of amounts	N24a, N24b, R7	
Percentage increase and decrease	R9a	
Percentage increase and decrease using a multiplier	R9b	
ASSESSMENT 4 – FRACTIONS, DECIMALS AND PERCENTAGES		
UNIT 5 (Real Life Graphs)		
Coordinates	A1a, A1b, A5	
Conversion graphs		
Speed Distance Time calculations	R11a	
Distance-time graphs	N21a, N21b, A21a	
Time Series Graphs		
Real life Graphs	A21b	
Curved graphs	A15	
UNIT 9 (Straight-line graphs)		
Direct proportion on graphs		
Linear graphs from a table of values	A5, A14a	
Gradients	A14b	
$y = mx + c$	A14c	
ASSESSMENT 5 – REAL LIFE & STRAIGHT LINE GRAPHS		

-- **End of Year 8** --