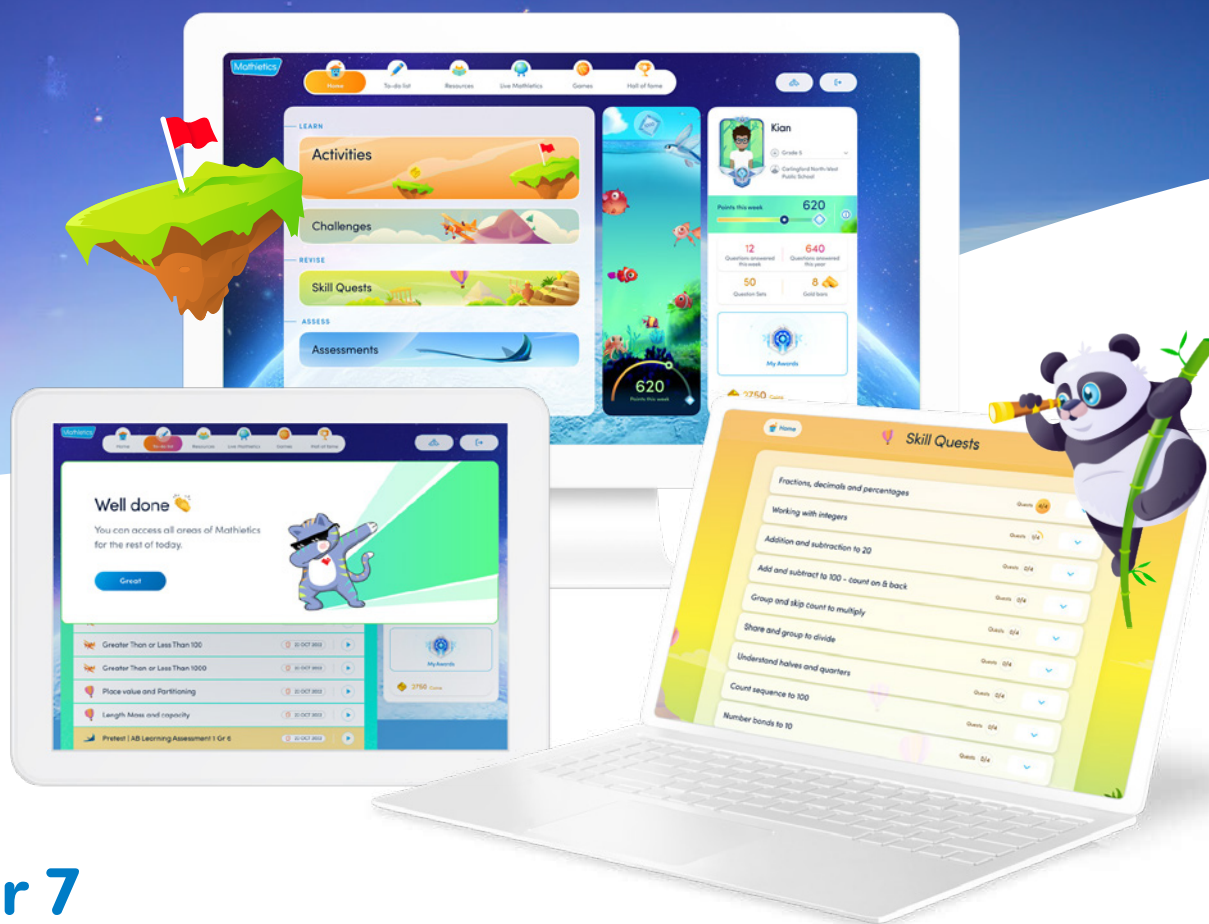


Mathletics

New Zealand Curriculum Mathematics and Statistics (2026)

Scope & Sequence



Phase 3, Year 7

Mathletics

Term one			
Week 1	Number	Number structures and operations	Powers & square numbers
Week 2			Multiples and factors Rounding whole numbers
Week 3			Multiplication
Week 4			Division
Week 5			Estimate to check Order of operations
Week 6	Geometry	Spatial reasoning	Angle types
Week 7		Shape	2D shapes & 3D solids review
Week 8	Number	Number structures and operations	Fractions - equivalence/compare & order
Week 9			Decimal place value & rounding

Term two			
Week 1	Number	Number structures and operations	Fractions + -
Week 2	Geometry	Spatial reasoning	Unknown angles & angle relationships
Week 3	Number	Number structures and operations Financial maths	Decimals + - Money
Week 4			Integers
Week 5			Integers + -
Week 6			Fractions x ÷
Week 7			Decimals x ÷
Week 8	Measurement	Measuring	Time & timetables
Week 9			Estimate & measure/measurement units

Term three			
Week 1	Number	Number structures and operations	Percentage review FDP conversions
Week 2			Calculating percentages/money & discounts
Week 3	Algebra	Equations and relationships	Algebraic expressions & substitution
Week 4			Linear equations
Week 5	Geometry	Spatial reasoning	Transformations on the coordinate plane
Week 6	Algebra	Equations and relationships	Linear relationships
Week 7	Measurement	Measuring	Perimeter & area
Week 8			Area & volume
Week 9	Probability	Experimental probability	Probability experiments

Term four			
Week 1	Statistics Probability	Developing knowledge from data Visualisation of data Interpretation of data	Statistics – developing knowledge
Week 2			Statistics – data visualisation & interpretation
Week 3			Statistics – data visualisation
Week 4		Experimental and theoretical probability	Probability
Week 5	Geometry	Spatial reasoning	Views of 3D shapes
Week 6	Number	Number structures and operations	Proportional Reasoning
Week 7	Geometry	Spatial reasoning Pathways	Transformations on the coordinate plane
Week 8			Maps and scale
Week 9	Review		

Number	TERM & WEEK
Number structures and operations	
Reading, writing comparing, and ordering whole numbers using powers of 10 (e.g. $10,000 = 10^4$, $1000 < 10^4$)	T1 W1
Representing numbers in expanded form using powers of 10 (e.g. $34,506 = 3 \times 10^4 + 4 \times 10^3 + 5 \times 10^2 + 6$)	T1 W1
Using exponents and identifying square roots for square numbers up to at least 144	T1 W1
Using radicals ($\sqrt{\quad}$) to represent square roots	T1 W1
Using divisibility rules to identify numbers that are divisible by 2, 3, 4, 5, 6, 8, 9, and 10	T1 W2, 4
Identifying prime numbers to 100	T1 W2
Finding the highest common factor (HCF) of two numbers under 100, and finding the least common multiple (LCM) of two numbers under 10	T1 W2
Locating integers on a number line	T2 W4
Ordering whole negative and positive numbers using a number line	T2 W4
Identifying the additive inverse of any number	T2 W5
Representing addition and subtraction of integers using a number line	T2 W5
Using negative numbers to solve problems in a range of contexts, including the measurement of temperature and finance	T2 W5
Using rounding and estimation to predict results and to check the reasonableness of calculations (e.g. $0.73 + 0.8 + 0.999$ must be less than 3 since each are close to but less than 1)	T1 W5
Rounding whole numbers to any specified power of 10, and rounding decimals to the nearest whole number, tenth, or hundredth	T1 W2, 9
Multiplying whole numbers	T1 W3
Dividing whole numbers by one- or two-digit divisors (e.g. $327 \div 5 = 65.4$ or $65 \frac{2}{5}$)	T1 W4
Evaluating expressions using the order of operations	T1 W5
Identifying, reading, writing, and representing fractions, decimals, and percentages	T1 W8,9 T3 W1
Comparing, ordering, and converting between fractions, decimals, and percentages	T1 W8,9 T3 W1
Finding equivalent fractions and representing fractions in their simplest form	T1 W8 T2 W1
Adding and subtracting fractions, including improper fractions and mixed numbers, and representing the answer in its simplest form	T2 W1
Adding and subtracting decimals	T2 W3
Multiplying and dividing numbers by powers of 10	T1 W3,4 T2 W7
Multiplying whole numbers by fractions and representing the answer in its simplest form	T2 W6
Multiplying decimals by whole numbers (e.g. 0.7×5 and 0.7×50 , which both relate to knowing $7 \times 5 = 35$)	T2 W7
Dividing fractions by whole numbers and representing the answer in its simplest form	T2 W6
Dividing a whole number by a unit fraction	T2 W6
Finding a fraction of a whole number (e.g. $\frac{5}{3}$ of 186)	T2 W6
Finding a whole amount when given a fraction (e.g. $\frac{5}{4}$ of the set is 85, what is the whole set?)	T2 W6 T4 W6
Finding common percentages of whole numbers	T3 W2 T4 W6
Finding the whole (100%) when given a percentage (e.g. 40% is 28)	T3 W2
Using proportional reasoning to explore multiplicative relationships between quantities (e.g. 'If there are 3 red for every 7 blue balls, how many balls are there altogether when there are 18 red balls?')	T4 W6

Number	TERM & WEEK
Financial mathematics	
Calculating the total cost and change for a transaction involving any amount of money	T2 W3
Applying percentage discounts to whole dollar amounts (e.g. in a 20%-off sale)	T2 W3
Algebra	
Equations and relationships	
Forming and solving one- and two-step linear equations with integer solutions (e.g. $t + 7 = 12$, $5s + 3 = 18$)	T3 W4
Checking the truth of and completing number sentences involving all four operations and including the use of inequalities (e.g. $0.8 \times 12 \leq 8 \times 0.5 + 8$, true or false?)	T3 W4
Using substitution to find the value of an expression or formula (e.g. calculating $w + 12$ given $w = 4$)	T3 W3
Rearranging known formulae using one or two steps (e.g. making w the subject of $A=lw$)	T3 W4
Simplifying expressions involving any of the four operations by collecting like terms (e.g. $3a+a+a=5a$, $3b-2b=b$)	T3 W3
Identifying and plotting points in the four quadrants of the coordinate plane, using ordered pairs and values from a table	T3 W5
Using tables, graphs in the coordinate plane, and diagrams to recognise the relationship between the ordinal position and its corresponding element in a linear pattern, develop a rule for the pattern in words, and make conjectures about further elements in the pattern	T3 W5
Identifying the constant increase or decrease in a linear pattern, using variables and algebraic notation to represent the rule in an equation, and using the equation to make conjectures	T3 W5
Measurement	
Measuring	
Selecting and using an appropriate base measure (e.g. metre, gram, litre) within the metric system, along with a prefix (e.g. kilo-, centi-) to show the size of units	T2 W9
Using formulae to find unknown measurements related to perimeter (e.g. the length of the unknown sides of a square given its perimeter, the length of an unknown side in a composite shape given its perimeter)	T3 W7
Using formulae to find unknown measurements related to area (e.g. the base of a triangle given its area and height, the area of a figure composed of a triangle and rectangle, given side lengths)	T3 W7, 8
Using formulae to find unknown measurements related to volume (e.g. the dimensions of a cube given its volume, the volume of a rectangular prism given side lengths)	T3 W8
Reading, interpreting, and using timetables and charts that present information about duration	T2 W8

Geometry	TERM & WEEK
Shape	
Classifying triangles by both their angle and side properties	T1 W7
Spatial reasoning	
Transforming 2D shapes in the coordinate plane by a single translation, reflection across a given mirror line, or a rotation about a given point by a multiple of 90 degrees	T3 W5 T4 W7
Identifying the 2D shapes that compose 3D shapes	T1 W7
Drawing nets for prisms and pyramids	T4 W5
Reasoning about unknown angles in situations involving perpendicular lines, parallel lines, and transversals	T1 W6 T2 W2
Solving for an unknown angle in a diagram by setting up and solving a multi-step equation based on supplementary, complementary, vertical, and adjacent angle relationships	T2 W2
Pathways	
Interpreting and communicating the location of positions and pathways using coordinates, angle measures, and the eight main and halfway compass points (e.g. NE, which is 45° E from N)	T4 W8

Statistics	TERM & WEEK
Developing knowledge from data	
Planning and collecting data in order to respond to a statistical question (e.g. Are our feet the same length?)	T4 W1
Calculating the mean, median, and mode for numerical data	T4 W1
Calculating the range for numerical data	T4 W1
Visualisation of data	
For a given set of data, choosing and constructing an appropriate data visualisation according to the data type (e.g. a dot plot, bar graph, time-series graph)	T4 W3
Noticing and explaining outliers in a given set of data	T4 W1, 2
Interpretation of data	
Responding to statistical questions by calculating an appropriate measure of central tendency and range for a variety of data tables and data visualisations	T4 W1, 2
Interpreting data visualisations, including those from contemporary media	T4 W2
Identifying when a data visualisation cannot be interpreted accurately due to missing information	T4 W2
Identifying outliers by eye and taking them into account when using range as a measure of spread	T4 W1

Probability	TERM & WEEK
Experimental probability	
Carrying out a chance experiment and calculating the experimental probability of each outcome	T3 W9
Comparing experimental probability (using at least 30 trials) to theoretical probability, and explaining why they differ and how increasing the number of trials reduces this difference	T3 W9 T4 W4
Carrying out chance experiments of at least 100 trials and comparing the experimental probability of each individual outcome to its theoretical probability, in order to demonstrate the Law of Large Numbers	T3 W9 T4 W4
Experimental probability	
Calculating probabilities for events as decimals, fractions, and percentages	T4 W4
Comparing the likelihood of different events	T4 W4
Calculating probabilities for complementary events	T4 W4

Focus and practice statements	Online activities: Curated content in a suggested teaching sequence				Ebook pages
	(A) ACTIVITIES (COURSES) (SQ) SKILL QUESTS (C) CHALLENGES				
<p>1 Powers & square numbers</p> <p>Reading, writing comparing, and ordering whole numbers using powers of 10 (e.g. $10,000 = 10^4$, $1000 < 10^3$) Representing numbers in expanded form using powers of 10 (e.g. $34,506 = 3 \times 10^4 + 4 \times 10^3 + 5 \times 10^2 + 6$) Using exponents and identifying square roots for square numbers up to at least 144 Using radicals ($\sqrt{\quad}$) to represent square roots</p>	<p>(A)</p> <p>Number: Powers & square roots</p> <ul style="list-style-type: none"> Scientific Notation 1 Index Notation Square Roots 	<p>(SQ)</p> <p>Exponents & square roots</p> <ul style="list-style-type: none"> Exponents 	<p>(SQ)</p> <p>Write numbers using powers of 10</p> <ul style="list-style-type: none"> Writing numbers using powers of 10 	<p>(C)</p> <p>Number & Algebra: Indices LEVEL 6–8</p> <ul style="list-style-type: none"> Squaring away area 	<p>(V7-S) Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> Read and understand numbers (pp 1–4)
<p>2 Multiples & factors Rounding whole numbers</p> <p>Using divisibility rules to identify numbers that are divisible by 2, 3, 4, 5, 6, 8, 9, and 10 Identifying prime numbers to 100 Finding the highest common factor (HCF) of two numbers under 100, and finding the least common multiple (LCM) of two numbers under 10 Rounding whole numbers to any specified power of 10, and rounding decimals to the nearest whole number, tenth, or hundredth</p>	<p>(A)</p> <p>Number: Primes, factors & multiples</p> <ul style="list-style-type: none"> Prime or Composite Numbers 	<p>(SQ)</p> <p>Divisibility rules</p> <ul style="list-style-type: none"> Divisibility rules 	<p>(SQ)</p> <p>HCF & LCM</p> <ul style="list-style-type: none"> HCF & LCM 	<p>(SQ)</p> <p>Rounding whole numbers & decimals</p> <ul style="list-style-type: none"> Round whole numbers <p>(C)</p> <p>Number & Algebra: Multiplication & Division LEVEL 6–8</p> <ul style="list-style-type: none"> Many ants make light work 	<p>(V6-F) Multiplication and Division</p> <ul style="list-style-type: none"> Mental multiplication and Mental division strategies (pp 9–12)
<p>3 Multiplication</p> <p>Multiplying whole numbers Multiplying and dividing numbers by powers of 10</p>	<p>(A)</p> <p>Number: Multiplication & division</p> <ul style="list-style-type: none"> Are You Ready? Multiplying Whole Numbers by 10, 100, and 1000 Multiply 2 Digits Area Model Multiply: 2-Digit Number, Regroup 		<p>(SQ)</p> <p>Multiply whole numbers</p> <ul style="list-style-type: none"> Multiplying whole numbers 	<p>(V7-S) Multiplication and Division</p> <ul style="list-style-type: none"> Mental division strategies (pp 2–6) Written methods (pp 13–15) 	
<p>4 Division</p> <p>Dividing whole numbers Multiplying and dividing numbers by powers of 10 Using divisibility rules to identify numbers that are divisible by 2, 3, 4, 5, 6, 8, 9, and 10</p>	<p>(A)</p> <p>Multiplication & division</p> <ul style="list-style-type: none"> Dividing by 10, 100, 1000 Rounding numbers for division Mental Methods Division 3 		<p>(SQ)</p> <p>Divide whole numbers</p> <ul style="list-style-type: none"> Dividing whole numbers, 1-digit divisor Dividing whole numbers, 2-digit divisor 	<p>(V7-S) Multiplication and Division</p> <ul style="list-style-type: none"> Mental division strategies (pp 7, 8, 10–12) Written methods (pp 16–18) 	
<p>5 Estimate to check Order of operations</p> <p>Using rounding and estimation to predict results and to check the reasonableness of calculations (e.g. $0.73 + 0.8 + 0.999$ must be less than 3 since each are close to but less than 1) Evaluating expressions using the order of operations</p>	<p>(A)</p> <p>Number: Multiplication & division</p> <ul style="list-style-type: none"> Estimation: Multiply and Divide 	<p>(SQ)</p> <p>Estimate calculations</p> <ul style="list-style-type: none"> Estimating whole number calculations 	<p>(A)</p> <p>Multiplication & division</p> <ul style="list-style-type: none"> Order of Operations 1 (BIDMAS) Identifying errors in applying the order of operations 	<p>(SQ)</p> <p>Order of operations</p> <ul style="list-style-type: none"> Order of operations 	<p>(V7-S) Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> Round and estimate (pp 19–22) <p>(V7-S) Patterns</p> <ul style="list-style-type: none"> Properties of arithmetic – order of operations (pp 34–35)

Focus and practice statements	Online activities: Curated content in a suggested teaching sequence			Ebook pages
	(A) ACTIVITIES (COURSES)	(SQ) SKILL QUESTS	(C) CHALLENGES	
<p>6 Angle types</p> <p>Reasoning about unknown angles in situations involving perpendicular lines, parallel lines, and transversals</p>	<p>(A)</p> <p>Geometry: Shape, space, pathways</p> <ul style="list-style-type: none"> • Labelling Angles • Angles in a Revolution • Equal, Complementary or Supplementary Angles • Complementary, Supplementary or Neither 	<p>(SQ)</p> <p>Identify angle relationships</p> <ul style="list-style-type: none"> • Identifying angle relationships 	<p>(C)</p> <p>Angles LEVEL 5–7</p> <ul style="list-style-type: none"> • Adjacent angles 	<p>(7-5) Geometry</p> <ul style="list-style-type: none"> • Lines and angles (pp 2–4)
<p>7 2D shapes & 3D solids review</p> <p>Classifying triangles by both their angle and side properties Identifying the 2D shapes that compose 3D shapes</p>	<p>(A)</p> <p>Geometry: Shape, space, pathways</p> <ul style="list-style-type: none"> • Triangle Tasters • Faces, Edges and Vertices of 3D Shapes (something easier) 	<p>(SQ)</p> <p>Classify triangles</p> <ul style="list-style-type: none"> • Classifying triangles 	<p>(SQ)</p> <p>Identify 2D shapes in 3D shapes</p> <ul style="list-style-type: none"> • Identifying the 2D shapes that compose 3D shapes 	<p>(7-5) Geometry</p> <ul style="list-style-type: none"> • 2D Shapes (pp 7–12) • 3D Solids (pp 25–27)
<p>8 Fractions – equivalence / compare & order</p> <p>Finding equivalent fractions and representing fractions in their simplest form Identifying, reading, writing, and representing fractions, decimals, and percentages Comparing, ordering, and converting between fractions, decimals, and percentages</p>	<p>(A)</p> <p>Rational numbers: Fractions</p> <ul style="list-style-type: none"> • The Equivalent Fraction • Fraction Wall Labelling 1 • Improper to Mixed • Simplify Fractions 	<p>(SQ)</p> <p>Compare & order FDP</p> <ul style="list-style-type: none"> • Comparing & ordering fractions & mixed numbers 		<p>(7-5) Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> • Fractions (pp 1–9)
<p>9 Decimal place value & rounding</p> <p>Identifying, reading, writing, and representing fractions, decimals, and percentages Comparing, ordering, and converting between fractions, decimals, and percentages Rounding whole numbers to any specified power of 10, and rounding decimals to the nearest whole number, tenth, or hundredth</p>	<p>(A)</p> <p>Rational numbers: Decimals</p> <ul style="list-style-type: none"> • Are You Ready? • Decimals on a Number Line • Comparing Decimals • Rounding Decimals 	<p>(SQ)</p> <p>Represent decimals</p> <ul style="list-style-type: none"> • Decimal place value 	<p>(SQ)</p> <p>Round whole numbers & decimals</p> <ul style="list-style-type: none"> • Rounding decimals 	<p>(7-5) Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> • Decimal fractions (pp 12–15)


Focus and practice statements	Online activities: Curated content in a suggested teaching sequence			Ebook pages
<p>1 Fractions + -</p> <p>Adding and subtracting fractions, including improper fractions and mixed numbers, and representing the answer in its simplest form Finding equivalent fractions and representing fractions in their simplest form</p>	<p>(A)</p> <p>Rational numbers: Fractions</p> <ul style="list-style-type: none"> • No Common Denominator • Add Like Mixed Numbers • Subtract Like Mixed Numbers 	<p>(SQ)</p> <p>Add & subtract fractions</p> <ul style="list-style-type: none"> • Adding fractions & mixed numbers • Subtracting fractions & mixed numbers 	<p>(V7-G) Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> • Calculating (pp 28–30) <p>(V8-H) Fractions</p> <ul style="list-style-type: none"> • Topic 5 (pp 18–21) 	
<p>2 Unknown angles & angle relationships</p> <p>Solving for an unknown angle in a diagram by setting up and solving a multi-step equation based on supplementary, complementary, vertical, and adjacent angle relationships Reasoning about unknown angles in situations involving perpendicular lines, parallel lines, and transversals</p>	<p>(A)</p> <p>Geometry: Shape, space, pathways</p> <ul style="list-style-type: none"> • Vertically Opposite: Value of x 	<p>(SQ)</p> <p>Unknown angles</p> <ul style="list-style-type: none"> • Unknown angles, parallel lines & transversal • Complementary & supplementary angles • Adjacent angles • Vertical angles 	<p>(V8-H) Angles</p> <ul style="list-style-type: none"> • Topic 10 (pp 15–20) 	
<p>3 Decimals + - Money</p> <p>Adding and subtracting decimals Calculating the total cost and change for a transaction involving any amount of money</p>	<p>(A)</p> <p>Rational numbers: Decimals</p> <ul style="list-style-type: none"> • Estimate decimal sums • Estimate decimal differences 	<p>(SQ)</p> <p>Add & subtract decimals</p> <ul style="list-style-type: none"> • Adding decimals • Subtracting decimal 	<p>(A)</p> <p>Number: Financial maths</p> <ul style="list-style-type: none"> • Money Problems: Four Operations 	<p>(V7-G) Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> • Calculating (pp 33–36)
<p>4 Integers</p> <p>Locating integers on a number line Ordering whole negative and positive numbers using a number line</p>	<p>(A)</p> <p>Number: Integers</p> <ul style="list-style-type: none"> • Directed Numbers • Ordering Integers (Number Line) 	<p>(SQ)</p> <p>Integers on a number line</p> <ul style="list-style-type: none"> • Integers on a number line 	<p>(SQ)</p> <p>Order rational numbers</p> <ul style="list-style-type: none"> • Ordering rational numbers 	<p>(V7-G) Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> • Types of numbers (p 9) <p>(V8-H) Directed Numbers</p> <ul style="list-style-type: none"> • Topic 4 (pp 3, 4, 11–13)
<p>5 Integers + -</p> <p>Identifying the additive inverse of any number Representing addition and subtraction of integers using a number line Using negative numbers to solve problems in a range of contexts, including the measurement of temperature and finance</p>	<p>(A)</p> <p>Number: Integers</p> <ul style="list-style-type: none"> • Negative or Positive? 	<p>(SQ)</p> <p>Add & subtract integers, number line</p> <ul style="list-style-type: none"> • Adding & subtracting integers, number line 	<p>(SQ)</p> <p>Additive inverse</p> <ul style="list-style-type: none"> • Additive inverse <p>(SQ)</p> <p>Negative numbers in context</p> <ul style="list-style-type: none"> • Negative numbers in context 	<p>(V7-G) Reading and Understanding Whole Numbers</p> <ul style="list-style-type: none"> • Types of numbers (p 10) <p>(V8-H) Directed Numbers</p> <ul style="list-style-type: none"> • Topic 4 (pp 14, 15, 17–20)

Focus and practice statements	Online activities: Curated content in a suggested teaching sequence			Ebook pages		
	(A) ACTIVITIES (COURSES)	(SQ) SKILL QUESTS	(C) CHALLENGES			
<p>6 Fractions x ÷</p> <p>Multiplying whole numbers by fractions and representing the answer in its simplest form Finding a fraction of a whole number (e.g. $\frac{5}{3}$ of 186) Finding a whole amount when given a fraction (e.g. $\frac{3}{4}$ of the set is 85, what is the whole set?) Dividing fractions by whole numbers and representing the answer in its simplest form Dividing a whole number by a unit fraction</p>	<p>(A) Rational numbers: Fractions</p> <ul style="list-style-type: none"> Fraction of an amount 	<p>(SQ) Find a fraction of an amount</p> <ul style="list-style-type: none"> Finding a fraction of an amount 	<p>(A) Rational numbers: Fractions</p> <ul style="list-style-type: none"> Multiply: Whole Number and Fraction Divide by a Unit Fraction 	<p>(SQ) Multiply whole numbers & fractions</p> <ul style="list-style-type: none"> Multiplying whole numbers and fractions 	<p>(SQ) Divide fractions by whole numbers</p> <ul style="list-style-type: none"> Dividing fractions by whole numbers 	<p>(Y7-5) Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> Fractions of an amount (pp 21, 22) Calculating (pp 31, 32 Q5 only)
<p>7 Decimals x ÷</p> <p>Multiplying decimals by whole numbers (e.g. 0.7×5 and 0.7×50, which both relate to knowing $7 \times 5 = 35$) Multiplying and dividing numbers by powers of 10</p>	<p>(A) Rational numbers: Decimals</p> <ul style="list-style-type: none"> Multiply Decimal by Whole Number 	<p>(SQ) Multiply & divide decimals, powers of 10</p> <ul style="list-style-type: none"> Multiplying decimals by powers of 10 Dividing decimals by powers of 10 	<p>(SQ) Multiply decimals & whole numbers</p> <ul style="list-style-type: none"> Multiplying decimals & whole numbers 			<p>(Y7-5) Fractions, Decimals and Percentages</p> <ul style="list-style-type: none"> Calculating (pp 37–40)
<p>8 Time & timetables</p> <p>Reading, interpreting, and using timetables and charts that present information about duration</p>	<p>(A) Measurement: Measuring & time</p> <ul style="list-style-type: none"> Are You Ready? Time Zones 	<p>(SQ) Timetables</p> <ul style="list-style-type: none"> Timetables 	<p>(C) Measurement: Time LEVEL 5–7</p> <ul style="list-style-type: none"> 24-hour travel times 	<p>(C) Measurement: Time LEVEL 6–8</p> <ul style="list-style-type: none"> What's the time in Tokyo? Watching international sport live 		<p>(Y7-5) Time</p> <ul style="list-style-type: none"> Telling time (pp 5–7) Calculating time (pp 9–14) Timetables (pp 15–20)
<p>9 Estimate & measure / measurement units</p> <p>Selecting and using an appropriate base measure (e.g. metre, gram, litre) within the metric system, along with a prefix (e.g. kilo-, centi-) to show the size of units</p>	<p>(A) Measurement: Measuring & time</p> <ul style="list-style-type: none"> Converting Units of Length Converting Units of Mass Millilitres and Litres 		<p>(SQ) The metric system</p> <ul style="list-style-type: none"> The metric system 			<p>(Y7-5) Length, Perimeter and Area</p> <ul style="list-style-type: none"> Units of length (pp 1–7) <p>(Y7-5) Volume, Capacity and Mass</p> <p>Estimate/measure:</p> <ul style="list-style-type: none"> Volume and capacity (pp 2, 3, 7, 8) Mass (pp 9, 10, 13) <p>Units of measure:</p> <ul style="list-style-type: none"> Volume and capacity (p 1) Mass (pp 11, 12)

Focus and practice statements	Online activities: Curated content in a suggested teaching sequence				Ebook pages	
	A ACTIVITIES (COURSES) SQ SKILL QUESTS C CHALLENGES					
<p>1 Percentage review FDP conversions</p> <p>Identifying, reading, writing, and representing fractions, decimals, and percentages Comparing, ordering, and converting between fractions, decimals, and percentages</p>	A Rational numbers: Percentages & proportion <ul style="list-style-type: none"> Modelling Percentages Common Fractions as Percentages Percents to Fractions Match Decimals and Percentages 		SQ Converting between FDP <ul style="list-style-type: none"> Converting between FDP 		Y7-G Fractions, Decimals and Percentages <ul style="list-style-type: none"> Decimal fractions (pp 17, 18) Y8-H Percentage Basics <ul style="list-style-type: none"> Topic 7 (pp 2–4, 6–9) 	
<p>2 Calculating percentages / money & discounts</p> <p>Finding common percentages of whole numbers Finding the whole (100%) when given a percentage (e.g. 40% is 28)</p>	A Rational numbers: Percentages & proportion <ul style="list-style-type: none"> Percent of a Number (Mental) Calculating Percentages 1 	SQ Common percentages of whole numbers <ul style="list-style-type: none"> Common percentages of whole numbers 	SQ Find the whole given a percentage <ul style="list-style-type: none"> Find the whole given a percentage 	SQ Percentage discounts <ul style="list-style-type: none"> Percentage discounts 	Y7-G Fractions, Decimals and Percentages <ul style="list-style-type: none"> Decimal fractions (p 20) Fractions of an amount (pp 23, 24) 	
<p>3 Algebraic expressions & substitution</p> <p>Using substitution to find the value of an expression or formula (e.g. calculating $w + 12$ given $w = 4$) Simplifying expressions involving any of the four operations by collecting like terms (e.g. $3a+a=5a, 3b-2b=b$)</p>	A Algebra: Equations & relationships <ul style="list-style-type: none"> Simple substitution 1 Simple substitution 2 	SQ Using substitution <ul style="list-style-type: none"> Using substitution 	A Algebra: Equations & relationships <ul style="list-style-type: none"> Like Terms: Add, Subtract 	SQ Simplify expressions <ul style="list-style-type: none"> Simplifying expressions 	Y7-G Patterns and Algebra <ul style="list-style-type: none"> Solving equations (pp 29 - 31) Y8-H Algebra basics <ul style="list-style-type: none"> Topic 1 (pp 3 – 7, 10 - 11) 	
<p>4 Linear equations</p> <p>Forming and solving one- and two-step linear equations with integer solutions (e.g. $t + 7 = 12, 5s + 3 = 18$) Checking the truth of and completing number sentences involving all four operations and including the use of inequalities (e.g. $0.8 \times 12 \leq 8 \times 0.5 + 8$, true or false?) Rearranging known formulae using one or two steps (e.g. making w the subject of $A=lw$)</p>	A Algebra: Equations & relationships <ul style="list-style-type: none"> Solve Equations: Add, Subtract 2 Solve Equations: Multiply, Divide 2 Solving Simple Equations 	SQ Change the subject <ul style="list-style-type: none"> Changing the subject 	SQ Check solutions <ul style="list-style-type: none"> Checking solutions 		Y7-G Patterns and Algebra <ul style="list-style-type: none"> Algebraic thinking (pp 18–19) Solving equations (pp 26–28) 	
<p>5 Transformations on the coordinate plane</p> <p>Identifying and plotting points in the four quadrants of the coordinate plane, using ordered pairs and values from a table Transforming 2D shapes in the coordinate plane by a single translation, reflection across a given mirror line, or a rotation about a given point by a multiple of 90 degrees</p>	A Geometry: Shape, space, pathways <ul style="list-style-type: none"> Coordinate Graphs: 1st Quadrant (something easier) 	SQ Plot points on the coordinate plane <ul style="list-style-type: none"> Plotting points on the coordinate plane 	SQ Transformations <ul style="list-style-type: none"> Translations on the coordinate plane 	C Geometry: Symmetry, Transformation & Location LEVEL 6–8 <ul style="list-style-type: none"> Calculating coordinates 	C Geometry: Symmetry, Transformation & Location LEVEL 6–8 <ul style="list-style-type: none"> Coordinating vertices 	Y7-G Position <ul style="list-style-type: none"> Coordinates (pp 6-7, 12) Y8-H The Number Plane <ul style="list-style-type: none"> Axes and coordinates (pp 6-8, 18-23)

Focus and practice statements	Online activities: Curated content in a suggested teaching sequence			Ebook pages
	(A) ACTIVITIES (COURSES)	(SQ) SKILL QUESTS	(C) CHALLENGES	
<p>6 Linear relationships</p> <p>Using tables, graphs in the coordinate plane, and diagrams to recognise the relationship between the ordinal position and its corresponding element in a linear pattern, develop a rule for the pattern in words, and make conjectures about further elements in the pattern</p> <p>Identifying and plotting points in the four quadrants of the coordinate plane, using ordered pairs and values from a table</p> <p>Identifying the constant increase or decrease in a linear pattern, using variables and algebraic notation to represent the rule in an equation, and using the equation to make conjectures</p>	<p>(A)</p> <p>Algebra: Equations & relationships</p> <ul style="list-style-type: none"> • Pattern Rules and Tables • Graphing from a Table of Values • Reading Values from a Line 	<p>(SQ)</p> <p>Linear patterns in tables</p> <ul style="list-style-type: none"> • Linear patterns in tables 	<p>(SQ)</p> <p>Linear patterns rules</p> <ul style="list-style-type: none"> • Linear patterns rules 	<p>(Y7-5) Patterns and Algebra</p> <ul style="list-style-type: none"> • Patterns and functions (pp 3–10, 12, 13)
<p>7 Perimeter & area</p> <p>Using formulae to find unknown measurements related to perimeter (e.g. the length of the unknown sides of a square given its perimeter, the length of an unknown side in a composite shape given its perimeter)</p> <p>Using formulae to find unknown measurements related to area (e.g. the base of a triangle given its area and height, the area of a figure composed of a triangle and rectangle, given side lengths)</p>	<p>(A)</p> <p>Measurement: Perimeter & area</p> <ul style="list-style-type: none"> • Are You Ready? • Perimeter Detectives 2 	<p>(SQ)</p> <p>Perimeter</p> <ul style="list-style-type: none"> • Perimeter 	<p>(SQ)</p> <p>Area</p> <ul style="list-style-type: none"> • Area 	<p>(Y7-5) Length, Perimeter and Area</p> <ul style="list-style-type: none"> • Perimeter (pp 8–12, 15) • Area (p 18)
<p>8 Area & volume</p> <p>Using formulae to find unknown measurements related to area (e.g. the base of a triangle given its area and height, the area of a figure composed of a triangle and rectangle, given side lengths)</p> <p>Using formulae to find unknown measurements related to volume (e.g. the dimensions of a cube given its volume, the volume of a rectangular prism given side lengths)</p>	<p>(A)</p> <p>Measurement: Perimeter & area</p> <ul style="list-style-type: none"> • Area: Composite Shapes • Volume: Rectangular Prisms 2 	<p>(SQ)</p> <p>Volume</p> <ul style="list-style-type: none"> • Volume 	<p>(C)</p> <p>Measurement: Area</p> <p>LEVEL 6–8</p> <ul style="list-style-type: none"> • What is the base length? • Stained-glass triangles 	<p>(Y7-5) Length, Perimeter and Area</p> <ul style="list-style-type: none"> • Area (pp 19, 20, 22–25)
<p>9 Probability experiments</p> <p>Carrying out a chance experiment and calculating the experimental probability of each outcome</p> <p>Comparing experimental probability (using at least 30 trials) to theoretical probability, and explaining why they differ and how increasing the number of trials reduces this difference</p> <p>Carrying out chance experiments of at least 100 trials and comparing the experimental probability of each individual outcome to its theoretical probability, in order to demonstrate the Law of Large Numbers</p>	<p>(A)</p> <p>Probability: Experimental & theoretical</p> <ul style="list-style-type: none"> • Simple Probability • Probability scale 	<p>(SQ)</p> <p>Calculate experimental probability</p> <ul style="list-style-type: none"> • Calculating experimental probability 	<p>(C)</p> <p>Probability</p> <p>LEVEL 6–8</p> <ul style="list-style-type: none"> • Rolling to win 	<p>(Y7-5) Chance and probability</p> <ul style="list-style-type: none"> • Chance and probability (pp 1–10)

Focus and practice statements	Online activities: Curated content in a suggested teaching sequence			Ebook pages		
	(A) ACTIVITIES (COURSES)	(SQ) SKILL QUESTS	(C) CHALLENGES			
<p>1 Statistics – developing knowledge</p> <p>Calculating the mean, median, and mode for numerical data Calculating the range for numerical data Noticing and explaining outliers in a given set of data Responding to statistical questions by calculating an appropriate measure of central tendency and range for a variety of data tables and data visualisations Identifying outliers by eye and taking them into account when using range as a measure of spread</p>	<p>(A) Statistics: Knowledge</p> <ul style="list-style-type: none"> • Mean/Mean from frequency table • Median/Median from frequency table • Mode/Mode from frequency table • Data Extremes and Range 	<p>(SQ) Outliers</p> <ul style="list-style-type: none"> • Outliers 	<p>(SQ) Appropriate statistical measures</p> <ul style="list-style-type: none"> • Appropriate statistical measures 	<p>(V7-G) Data Representation</p> <ul style="list-style-type: none"> • Collecting and analysing data (pp 22–28) 		
<p>2 Statistics – data visualisation & interpretation</p> <p>Interpreting data visualisations, including those from contemporary media Noticing and explaining outliers in a given set of data Responding to statistical questions by calculating an appropriate measure of central tendency and range for a variety of data tables and data visualisations Identifying when a data visualisation cannot be interpreted accurately due to missing information</p>	<p>(A) Statistics: Visualisation & interpretation</p> <ul style="list-style-type: none"> • Line Graphs: Interpretation • Sector Graphs • Frequency Histograms 	<p>(SQ) Interpret data visualisations</p> <ul style="list-style-type: none"> • Interpreting dot plots • Interpreting strip graphs 	<p>(SQ) Misleading information</p> <ul style="list-style-type: none"> • Misleading information 	<p>(V7-G) Data Representation</p> <ul style="list-style-type: none"> • Types of graphs 1 (pp 3–4, 7–13, 32–34) 		
<p>3 Statistics – data visualisation</p> <p>For a given set of data, choosing and constructing an appropriate data visualisation according to the data type (e.g. a dot plot, bar graph, time-series graph)</p>	<p>(SQ) Choose & construct data visualisations</p> <ul style="list-style-type: none"> • Choosing data visualisations • Constructing dot plots • Constructing line plots • Constructing clustered bar graphs 	<p>(C) Statistics LEVEL 6–8</p> <ul style="list-style-type: none"> • A slice of the pie 	<p>(V7-G) Data Representation</p> <ul style="list-style-type: none"> • Types of graphs (pp 5, 14–16) 			
<p>4 Probability</p> <p>Comparing experimental probability (using at least 30 trials) to theoretical probability, and explaining why they differ and how increasing the number of trials reduces this difference Calculating probabilities for events as decimals, fractions, and percentages Comparing the likelihood of different events Calculating probabilities for complementary events</p>	<p>(SQ) Experimental & theoretical probability</p> <ul style="list-style-type: none"> • Experimental & theoretical probability 	<p>(A) Probability: Experimental & theoretical</p> <ul style="list-style-type: none"> • Dice and coins 	<p>(SQ) Calculate probability, FDP</p> <ul style="list-style-type: none"> • Calculating probability, FDP 	<p>(A) Probability: Experimental & theoretical</p> <ul style="list-style-type: none"> • Complementary Events 	<p>(SQ) Complementary events</p> <ul style="list-style-type: none"> • Complementary events 	<p>(V8-H) Chance</p> <ul style="list-style-type: none"> • Topic 8 (pp 18–22)
<p>5 Views of 3D shapes</p> <p>Drawing nets for prisms and pyramids</p>	<p>(SQ) Nets for prisms & pyramids</p> <ul style="list-style-type: none"> • Nets for prisms & pyramids 	<p>(C) Geometry: 3D Shapes LEVEL 5–7</p> <ul style="list-style-type: none"> • Notty Nets 	<p>(C) Geometry: 3D Shapes LEVEL 5–7</p> <ul style="list-style-type: none"> • Pyramids and prisms 	<p>(V7-G) Position</p> <ul style="list-style-type: none"> • Spatial orientation (pp 1, 2) <p>(V7-G) Geometry</p> <ul style="list-style-type: none"> • 3D Solids (pp 28–30) 		

Focus and practice statements	Online activities: Curated content in a suggested teaching sequence				Ebook pages
	(A) ACTIVITIES (COURSES)	(SQ) SKILL QUESTS	(C) CHALLENGES		
<p>6 Proportional Reasoning</p> <p>Using proportional reasoning to explore multiplicative relationships between quantities (e.g. 'If there are 3 red for every 7 blue balls, how many balls are there altogether when there are 18 red balls?') Finding a whole amount when given a fraction (e.g. $\frac{3}{4}$ of the set is 85, what is the whole set?)</p>	<p>(A) Rational numbers: Percentages & proportion</p> <ul style="list-style-type: none"> Percentage Word Problems Word Problems: Ratio 	<p>(SQ) Find the whole given a fraction</p> <ul style="list-style-type: none"> Finding the whole given a fraction 	<p>(SQ) Proportional reasoning</p> <ul style="list-style-type: none"> Proportional reasoning 	<p>(C) Number & Algebra: Percentages LEVEL 6–8</p> <ul style="list-style-type: none"> Simply equal 	
<p>7 Transformations on the coordinate plane</p> <p>Transforming 2D shapes in the coordinate plane by a single translation, reflection across a given mirror line, or a rotation about a given point by a multiple of 90 degrees</p>	<p>(A) Geometry: Shape, space, pathways</p> <ul style="list-style-type: none"> Transformations: Coordinate Plane 	<p>(SQ) Transformations</p> <ul style="list-style-type: none"> Reflections on the coordinate plane 	<p>(A) Geometry: Shape, space, pathways</p> <ul style="list-style-type: none"> Rotations: Coordinate Plane 	<p>(SQ) Transformations</p> <ul style="list-style-type: none"> Rotations on the coordinate plane <p>(C) Geometry: Symmetry, Transformation & Location LEVEL 7–9</p> <ul style="list-style-type: none"> Transformation triangle 	<p>(Y7-5) Geometry</p> <ul style="list-style-type: none"> Transformation, tessellation and symmetry (pp 16–19, 22–23)
<p>8 Maps and scale</p> <p>Interpreting and communicating the location of positions and pathways using coordinates, angle measures, and the eight main and halfway compass points (e.g. NE, which is 45° E from N)</p>	<p>(A) Geometry: Shape, space, pathways</p> <ul style="list-style-type: none"> What Direction Was That? Scale 	<p>(SQ) Location using compass points</p> <ul style="list-style-type: none"> Location using compass points 	<p>(C) Geometry: Symmetry, Transformation & Location LEVEL 5–7</p> <ul style="list-style-type: none"> A journey back in time 	<p>(C) Geometry: Symmetry, Transformation & Location LEVEL 5–7</p> <ul style="list-style-type: none"> Which way? 	<p>(Y7-5) Position</p> <ul style="list-style-type: none"> Spatial orientation (pp 3–4) Coordinates (pp 8–11) Maps and scale (pp 13–16)
<p>9 Review</p>	 Review earlier content				

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