

Mathletics

NZ Curriculum Mathematics and Statistics (2026)

Activities (Courses) and Skill Quests 



Phase 2, Years 4-6

December, 2025

Mathletics

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NZ Curriculum Mathematics and Statistics (2026)

Activities (Courses) & Skill Quests

December, 2025

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Phase 2, Year 4

Number

Number structure

Reading, writing, comparing, and ordering whole numbers up to 10,000 and representing them using base 10 structure

Activities

| | |
|---|------------------------------|
| Number structure: Whole number & place value | Place Value - Thousands |
| | Place Value 3 |
| | Numbers in Words |
| | Expanding Numbers |
| | Partition and Rename 1 |
| | Greater Than or Less Than 1 |
| | Which Is Greater? |
| | Which Is Less? |
| | Smallest and largest numbers |
| | Missing Numbers 1 |

Skill Quests

| | |
|--|--|
| Number structures: Numbers to 1,000 | Using place value with 3-digit numbers |
| | Reading & writing 3-digit numbers |
| | Comparing & ordering numbers to at least 1,000 |
| | Partitioning 3- & 4- digit numbers |
| Number structures: Numbers up to 10,000 | Reading & writing numbers up to 10,000 |
| | Finding numbers before & after |
| | Ordering & comparing numbers to 10,000 |

Rounding whole numbers to the nearest thousand, hundred, or ten

Activities

| | |
|---|-------------------|
| Number structure: Whole number & place value | Nearest Ten? |
| | Nearest Hundred? |
| | Nearest Thousand? |

Skill Quests

| | |
|--|----------------------------------|
| Number structures: Round to 10,100,1000 | Rounding whole numbers to 10,000 |
|--|----------------------------------|

Rounding tenths to the nearest whole number

Activities

Teacher directed

Skill Quests

| | |
|--|---|
| Number structures: Round tenths | Rounding decimal tenths to nearest whole number |
|--|---|

Counting forwards and backwards in 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 25s and 50s from multiples of the counting unit

Activities

| | |
|---|-------------------|
| Number structure: Whole number & place value | Counting up in 4s |
| | Counting up in 6s |
| | Counting up in 7s |
| | Counting up in 8s |

| 👑 Skill Quests | |
|------------------------------------|-----------------------------|
| Number structures: Count multiples | Counting in 2s |
| | Counting in 5s |
| | Counting in 3s |
| | Counting in 4s |
| | Counting in 6s, 7s, 8s & 9s |
| | Counting in 25s & 50s |

Counting in 10s, 100s, and 1,000s from any whole number up to 10,000


| 📋 Activities | |
|--|------------------------|
| Teacher directed | |
| 👑 Skill Quests | |
| Number structures: Count 10s 100 & 1,000 | Counting in 10s & 100s |
| | Counting in 1,000s |

Operations



| Adding and subtracting up to four-digit numbers | |
|---|--|
| 📋 Activities | |
| Operations: Addition & subtraction | Doubles and near doubles |
| | Complements to 50 and 100 |
| | Add 3 Numbers: Bonds to 100 |
| | Split Add and Subtract |
| | Jump add and subtract |
| | Add 3-digit Numbers |
| | 3-Digit Differences |
| | Add Three 2-Digit Numbers |
| | Repartition to Subtract |
| | Subtract Numbers: Regroup |
| 👑 Skill Quests | |
| Operations: Add & subtract | Adding & subtracting multiples of 10 |
| | Adding & subtracting multiples of 100 |
| | Add & subtract multiples of 100, 1,000, 10,000 |
| | Adding & subtracting to 3-digits, number line |
| | Adding & subtracting to 4-digits, number line |
| | Adding & subtracting with models |
| | Bridging to 10 up to 3-digits |
| | Rounding to add & subtract using 4-digit numbers |
| Operations: Add & subtract vertically | Vertical addition (no renaming) |
| | Vertical addition (with renaming) |
| | Vertical subtraction (no renaming) |
| | Vertical subtraction (with renaming) |

Memorising multiplication and corresponding division facts for 2s to 10s



| 📋 Activities | |
|---------------------------------------|-------------------------|
| Operations: Multiplication & division | Grouping in Sixes |
| | Grouping in Eights |
| | Grouping in Nines |
| | Bar Model $\times \div$ |



| | |
|---|--|
| | Dividing Sixes |
| | Dividing Eights |
| | Dividing Nines |
| | Times Tables |
| | Related Facts 2 |
| | Multiplication Turn-Abouts |
| | Multiply: 1-Digit Number |
|  Skill Quests | |
| Operations: Facts to 10 x 10 (x ÷) | Multiplication & division facts for 2 |
| | Multiplication & division facts for 3 |
| | Multiplication & division facts for 4 |
| | Multiplication & division facts for 5 |
| | Multiplication & division facts for 8 |
| | Multiplication & division facts for 10 |
| | Multiplication & division facts for 6 |
| | Multiplication & division facts for 7 |
| | Multiplication & division facts for 9 |
| | Multiplication & division facts to 10 x 10 |

Using place value and known and derived facts to multiply and divide mentally, including multiplying by 0 and 1 and dividing by 1



| | |
|---|---|
|  Activities | |
| Operations: Multiplication & division | Multiply 3 single-digit numbers |
| | Multiply: 2-Digit by 1-Digit |
| | Grid Methods 1 |
| | Multiply Multiples of 10 |
| | Halve it! |
| | Estimate Products |
| | Estimate Quotients |
|  Skill Quests | |
| Operations: Multiplication strategies | Multiplying 1-digit by tens using place value |
| | Using strategies to multiply 1-digit numbers |
| | Multiplying using the associative property |
| | Multiplying by 1 or 0 |



Multiplying two-digit and three-digit numbers by a one-digit number



| | |
|---|---|
|  Activities | |
| Operations: Multiplication & division | Multiply 3 single-digit numbers |
| | Multiply: 2-Digit by 1-Digit |
| | Grid Methods 1 |
| | Multiply Multiples of 10 |
| | Estimate Products |
| Measuring, perimeter, area, volume & time | Time Conversions: Whole Numbers 1 |
|  Skill Quests | |
| Operations: Multiply by 2- & 3-digits | Multiplying 2-digit by 1-digit using place value |
| | Multiplying 2-digit by 1-digit using doubling |
| | Multiplying 2-digit by 1-digit using an algorithm |
| | Multiplying 3-digit by 1-digit using place value |
| | Multiplying 3-digit by 1-digit using an algorithm |



| | |
|---|--|
| Dividing up to a three-digit whole number by a one-digit divisor, with no remainder (e.g. $65 \div 5$) | |
|  Activities | |
| Operations: Multiplication & division | Halve it! |
| | Estimate Quotients |
| Measuring, perimeter, area, volume & time | Time Conversions: Whole Numbers 1 |
|  Skill Quests | |
| Operations: Division strategies | Relating multiplication & division facts |
| | Exploring division to 10 x 10 using models |
| | Dividing by 1 |
| | Dividing using place value & known facts |



Rational numbers



| | |
|---|-----------------------------------|
| Reading, writing, and representing tenths as fractions and decimals | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Tenths | Representing & counting in tenths |
| | Understanding decimal tenths |
| | Connecting decimals & fractions |



| | |
|---|-----------------------------|
| Comparing and ordering tenths as fractions and decimals | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Compare & order tenths | Comparing & ordering tenths |



| | |
|---|--|
| Memorising and using the decimal equivalent of $\frac{1}{2}$ and fractions with denominators of 10 | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |



| | |
|---|--------------------------------|
| Dividing one- and two-digit whole numbers by 10 to make decimals and identify tenths | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Divide numbers by 10 | Finding unit fractions of sets |



| | |
|---|--|
| Multiplying decimal tenths by 10 | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |



| | |
|---|--|
| Comparing and ordering fractions with the same numerator or same denominator | |
|  Activities | |
| Rational numbers: Fractions | Comparing Fractions 1 |
| | Compare fractions 1b |
|  Skill Quests | |
| Rational numbers: Compare & order frac | Comparing & ordering fractions same denominators |
| | Comparing & ordering fractions same numerators |

| | |
|---|---|
| Relating fractions, improper fractions, and mixed numbers to their position on a number line | |
|  Activities | |
| Rational numbers: Fractions | Identifying Fractions on a Number Line |
| | Mixed and Improper Fractions on a Number Line |
|  Skill Quests | |
| Rational numbers: Improper & mixed | Converting improper fractions & mixed numbers |

| | |
|---|---|
| Identifying when two fractions are equivalent, using representations | |
|  Activities | |
| Rational numbers: Fractions | Mixed and Improper Fractions on a Number Line |
| | Equivalent Fractions on a Number line 1 |
| | What Mixed Number Is Shaded? |
|  Skill Quests | |
| Rational numbers: Equivalent fractions | Finding equivalent fractions using models |

| | |
|---|---|
| Adding and subtracting fractions with the same denominators, including beyond a whole | |
|  Activities | |
| Rational numbers: Fractions | Add: Common Denominator |
|  Skill Quests | |
| Add/subtract- same denominators | Adding & subtracting fractions up to 1 |
| | Adding & subtracting fractions beyond 1 |

| | |
|---|--|
| Adding and subtracting decimals to one decimal place (e.g. $1.3 + 0.2 = 1.5$) | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Decimal tenths + - | Adding & subtracting decimals using place value |
| | Adding & subtracting decimals using bridging to 10 |

| | |
|---|--|
| Using known multiplication and division facts to scale a quantity (e.g. to double or halve a recipe) | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Scaling | Using multiplication facts to scale a quantity |

Finding a unit fraction of a whole number, using multiplication and division facts and where the answer is a whole number (e.g. $\frac{1}{4}$ of 400)

Activities

Rational numbers: Fractions

Fraction Length Models 1

Unit fractions

Fractions of a Collection 1

Skill Quests

Rational numbers: Unit fractions of sets

Finding unit fractions of sets

Finding the whole set or amount when given a unit fraction, using multiplication and division facts (e.g. $\frac{1}{4}$ of a set is 7, what is the whole set?)

Activities

Teacher directed

Skill Quests

Rational numbers: Find the whole

Finding the whole from the part

Financial mathematics

Calculating the total cost of several items costing whole-dollar amounts and with different prices, or of multiples of the same item, including giving change

Activities

Teacher directed

Skill Quests

Financial maths: Calculate change

Calculating change

Representing amounts of currency using different combinations of denominations (e.g. making \$5 and 80 cents in multiple ways using play money)

Activities

Teacher directed

Skill Quests

Financial maths: Make money amounts

Using money

Algebra

Equations & relationships

Checking the truth of number sentences and completing open number sentences involving addition and subtraction (e.g. $8205 - 4721 = 3484$, true or false?; $4200 - \underline{\quad} = 4001$)

Activities

Algebra: Equations & relationships

Bar Model Problems 2

Missing values


Skill Quests

Equations: Add/sub open number sentences



Completing open number sentences add/sub

Checking the truth of number sentences and completing open number sentences involving multiplication and division (e.g. $11 \times 7 = 78$, true or false?; $\underline{\quad} \div 10 = 12$)

Activities

| | |
|--|--|
| Algebra: Equations & relationships | Fact Families: Multiply and Divide |
| | Missing Numbers: \times and \div facts |
|  Skill Quests | |
| Equations: Mult/div open number sentence | Using equivalence to solve problems |

Recognising, continuing, creating, and describing growing patterns (including numerical and non-numerical patterns) that change by adding, subtracting, or multiplying by a constant whole number (e.g. 5,7,9,11...; 3,6,12,24...)

| | |
|--|---|
|  Activities | |
| Algebra: Equations & relationships | Increasing patterns |
| | Decreasing Patterns |
| | Counting on a 100 grid |
|  Skill Quests | |
| Relationships: Growing number patterns | Recognising & creating growing patterns |
| | Record visual patterns in diagrams, lists, tables |



Measurement

Measuring



Using familiar objects (e.g. body parts) and experiences (e.g. time taken to travel to school, the temperature outside) to create estimation benchmarks

| | |
|--|--|
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |

Using the appropriate tool for measuring length, mass (weight), and capacity in mixed units (e.g. 1 m and 23 cm, 10 kg and 3 g, 2 L and 500 mL)

| | |
|--|--|
|  Activities | |
| Measuring, perimeter, area, volume & time | Which unit of Measurement? |
| | Using a Litre |
| | How Long is That? |
| | Measure to the Nearest Half Centimetre |
| | How Heavy is it? |
|  Skill Quests | |
| Measuring: Measure in cm & m | Measuring in m & cm |
| Measuring: Length in mm, cm & m | Introducing millimetres |
| Measuring: Appropriate units of length | Selecting appropriate units of length |
| Measuring: Measure mass (g & kg) | Measuring mass in g & kg |
| Measuring: Appropriate units of mass | Selecting appropriate units of mass |
| Measuring: Measure capacity (litres) | Measuring in litres |
| Measuring: Apply metric measures | Using appropriate metric measures |

Measuring temperature in degrees Celsius

| | |
|--|-----------------------------------|
|  Activities | |
| Measuring, perimeter, area, volume & time | What's the Temperature (Celsius)? |
|  Skill Quests | |
| Measuring: Measure temperature | Introducing thermometers |
| | Measuring temperature |

| | |
|--|---------------------------|
| Measuring the perimeter of polygons using metric units (mm, cm, and m) | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Perimeter of shapes |
|  Skill Quests | |
| Measuring: Perimeter | Measuring perimeter in cm |

| | |
|--|----------|
| Measuring the areas of irregular shapes covered with squares and half squares | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Measuring: Area of irregular shapes | Activity |

| | |
|---|---------------------------------------|
| Calculating the areas of rectangular figures (including squares) using multiplication of side lengths | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Area of Shapes |
|  Skill Quests | |
| Measuring: Area using multiplication | Calculating area using multiplication |

| | |
|--|-------------------------------|
| Measuring the volumes of rectangular prisms (cuboids) by filling them with identical 3D blocks | |
|  Activities | |
| Measuring, perimeter, area, volume & time | How many Blocks? |
|  Skill Quests | |
| Measuring: Volume | Comparing volume using blocks |

| | |
|--|----------------------|
| Estimating the size of angles by comparing them to 90, 180, and 360 degrees | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Estimating Angles |
| | Right Angle Relation |
|  Skill Quests | |
| Teacher directed | |

| | |
|--|----------------------------|
| Telling the time on analogue and digital clocks to the nearest minute | |
|  Activities | |
| Measuring, perimeter, area, volume & time | What is the Time? |
|  Skill Quests | |
| Measuring: Tell the time | Telling time to 5 minutes |
| | Telling time to the minute |

| | |
|---|---|
| Measuring duration in hours, minutes, and seconds, including mixed time units (e.g. 1h and 42mins, 3mins and 21s) | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Measuring: Units of time (hr, min, sec) | Exploring units of time (hr, min, sec) |
| | Working with mixed units of time (hr, min, sec) |

Finding equivalent durations of time using different units (e.g. 3 weeks is 21 days; 90 seconds = 1.5 minutes; 48 hours = 2 days)

Activities

Measuring, perimeter, area, volume & time

Time Conversions: Whole Numbers 1

Skill Quests

Measuring: Equivalent durations of time

Finding equivalent durations of time

Geometry

Shapes

Identifying, classifying, and describing the attributes of regular and irregular polygons of up to 12 sides, using edges, vertices, and angles

Activities

Geometry: Shape, space & pathways

Count Sides and Corners

Collect More Shapes

Skill Quests

Shapes: Regular & irregular polygons

Identifying & describing quadrilaterals

Exploring regular & irregular polygons

Identifying the number of lines of symmetry in 2D shapes

Activities

Geometry: Shape, space & pathways

Symmetry

Lines of Symmetry

Skill Quests

Shapes: Symmetry in shapes

Identifying line symmetry (1 or more)

Spatial reasoning

Visualising 3D shapes and connecting them with 2D diagrams, verbal descriptions, and the same shapes drawn from different perspectives

Activities

Geometry: Shape, space & pathways

Select the Objects

Relate Shapes and Solids

How Many Faces?

Skill Quests

Spatial reasoning: Shapes in 3D objects

Comparing faces of 3D objects with 2D shapes

Performing one-step transformations (reflections, translations, rotations) on 2D shapes

Activities

Geometry: Shape, space & pathways



Flip, Slide, Turn

Skill Quests

Spatial reasoning: Transformations



Identifying transformations

Pathways



| | |
|---|---|
| Use alphanumeric and general grid references to identify regions and plot positions on a grid map | |
|  Activities | |
| Geometry: Shape, space & pathways | Using a Key |
| | Map Coordinates |
|  Skill Quests | |
| Pathways: Grid references | Interpreting & using grid-referenced maps |

Statistics



Developing knowledge from data



| | |
|---|---|
| Collecting numerical data, and, if needed, rounding to an appropriate unit or part of a unit, based on the context (e.g. How many skips can we do in 30 seconds? How long does it take us to run 1000 m?) | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Data: Collecting numerical data | Asking questions, collecting & recording data |

Visualisation of data

| | |
|---|--|
| Creating dot-plot or bar-graph data visualisations | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Data: Creating data visualisations | Creating dot-plot data visualisations |
| | Creating bar-graph data visualisations |

Interpretation of data

| | |
|---|-----------|
| Answering questions about the frequency of a particular value in dot plots | |
|  Activities | |
| Statistics | Dot Plots |
|  Skill Quests | |
| Teacher directed | |

| | |
|---|-------------------------------------|
| Answering questions about individual values in a dot plot, while referring to the context | |
|  Activities | |
| Statistics | Dot Plots |
|  Skill Quests | |
| Data: Answer questions about dot plots | Answering questions about dot plots |

| Interpreting data visualisations | |
|-------------------------------------|----------------------------------|
| Activities | |
| Statistics | Tally Charts |
| | Bar Chart |
| | Interpreting Tables |
| Skill Quests | |
| Data: Interpret data visualisations | Interpreting data visualisations |

Distinguishing between when to use a particular value or the frequency for a given value when answering questions about dot plots (e.g. How many pets does the person with the most pets have? What's the most common number of pets that anyone has?)

| Activities |
|------------------|
| Teacher directed |
| Skill Quests |
| Teacher directed |

Phase 2, Year 5

Number

Number structure

Reading, writing, comparing, and ordering whole numbers up to 1,000,000 and representing them using base 10 structure

Activities

Number structure: Whole numbers & place value

Numbers from Words to Digits 1

Numbers from Words to Digits 2

Place Value to Millions

Expanded Notation

Place Value Partitioning

Skill Quests

Number structures: Numbers to 1,000,000

Reading & writing numbers to 1,000,000

Comparing & ordering numbers to 1,000,000

Partitioning up to 1,000,000

Finding factor pairs for numbers that result from multiplying any two whole numbers between 1 and 10

Activities

Operations: Multiplication & division

Find the Factor

Multiples of

Skill Quests

Number structures: Factor pairs

Factors up to 100

Rounding whole numbers to the nearest hundred thousand, ten thousand, thousand, hundred, or ten

Activities

Number structure: Whole numbers & place value

Rounding Numbers

Skill Quests

Number structures: Round whole numbers

Rounding whole numbers up to 100,000

Rounding tenths or hundredths to the nearest whole number

Activities

Rational numbers: Decimals & percentages

Nearest Whole Number

Skill Quests

Number structures: Round decimals

Rounding tenths

Rounding hundredths



Counting forwards and backwards in 11s and 12s from multiples of the counting unit



Activities

Teacher directed



Skill Quests



Teacher directed

| | |
|---|--|
| Counting in 1,000s, 10,000s, and 100,000s from any whole number up to 100,000 | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |

| | |
|---|-----------------------------------|
| Counting backwards through 0 to include negative whole numbers | |
|  Activities | |
| Number structure: Whole numbers & place value | Integers on a Number Line |
|  Skill Quests | |
| Number structures: Count back through 0 | Placing integers on a number line |

Operations

| | |
|---|---|
| Adding and subtracting increasingly large whole numbers | |
|  Activities | |
| Operations: Addition & subtraction | Bump add and subtract |
| | Jump Add and Subtract |
| | Split Add and Subtract |
| | Compensation - Add |
| | Compensation - Subtract |
| | Number Sequences Up to 1 Million |
| | Add Two 2-Digit Numbers: Regroup |
| | 2-Digit Differences: Regroup |
| | 3-Digit Differences: 1 Regrouping |
|  Skill Quests | |
| Operations: Add larger numbers | Adding & subtracting multiples of 100 |
| | Choosing efficient mental strategies |
| Operations: Estimation + - | Rounding & estimating with addition |
| | Rounding & estimating with subtraction |
| Operations: Properties of addition | Rounding & estimating with addition & subtraction |
| | Using the commutative property of addition |
| | Using the associative property of addition |

| | |
|---|---|
| Memorising multiplication and corresponding division facts for 2s to 12s | |
|  Activities | |
| Operations: Multiplication & division | Multiplication Facts |
| | Division Facts 1 |
| | Bar Model $\times \div$ |
|  Skill Quests | |
| Operations: Facts to 12 x 12 ($\times \div$) | Recalling multiplication facts to 10 x 10 |
| | Multiplying by 11 |
| | Multiplying by 12 |
| | Recalling multiplication facts to 12 x 12 |

| |
|--|
| Applying mental strategies, number facts, derived facts, factor pairs, and multiples to multiply and divide increasingly large numbers |
|--|

| <div> <div></div> Activities </div> | |
|---|---|
| Operations: Multiplication & division | Multiply 3 single-digit numbers |
| | Multiply Multiples of 10 |
| | Multiply More Multiples of 10 |
| | Multiplying by 10, 100, 1000 |
| | Double and Halve to Multiply |
| | Mental Methods Multiplication 2 |
| | Grid Methods 1 |
| | Grid Methods 2 |
| | Halve it! |
| | Remainders by Arrays |
| | Estimate Products |
| | Estimate Quotients |
| <div> <div></div> Skill Quests </div> | |
| Operations: Multiplication strategies | Multiplying 1-digit by tens using place value |
| | Using strategies to multiply 1-digit numbers |
| | Associative property of multiplication |
| | Commutative property of multiplication |
| | Multiplying using the split method |
| | Multiplying using an area model |
| | Multiplying using factorising |
| Operations: Mental strategies ($\times \div$) | Multiplying & dividing multiples of 10 |
| | Solving multiplication & division problems |
| | Rounding & estimating multiplication & division |

Multiplying three-digit and four-digit numbers by a one-digit number and multiplying two two-digit numbers



| <div> <div></div> Activities </div> | |
|---------------------------------------|---|
| Operations: Multiplication & division | Multiply 3 single-digit numbers |
| | Multiply Multiples of 10 |
| | Multiply More Multiples of 10 |
| | Multiplying by 10, 100, 1000 |
| | Double and Halve to Multiply |
| | Mental Methods Multiplication 2 |
| | Grid Methods 1 |
| | Grid Methods 2 |
| | Multiply: 1-Digit Number |
| | Contracted Multiplication |
| | Estimate Products |
| <div> <div></div> Skill Quests </div> | |
| Operations: Multiplication algorithms | Multiplying using long multiplication |
| | Multiplying using the standard written method |



Dividing up to four-digit whole numbers by a one-digit divisor, with a remainder (e.g. $278 \div 4 = 69$ remainder 2)



| <div> <div></div> Activities </div> | |
|---------------------------------------|---|
| Operations: Multiplication & division | Halve it! |
| | Remainders by Arrays |
| | Estimate Quotients |
| <div> <div></div> Skill Quests </div> | |
| Operations: Remainders in division | Introducing remainders in division |
| Operations: Division strategies | Dividing using halving & repeated halving |



| | |
|---------------------------------|---|
| | Dividing using partitioning |
| Operations: Division algorithms | Dividing using the extended algorithm |
| | Dividing using the contracted algorithm |



Rational numbers



| | |
|--|--|
| Reading, writing, and representing tenths and hundredths as fractions and decimals | |
|  Activities | |
| Rational numbers: Decimals & percentages | Decimal Place Value |
| | Decimals from Words to Digits 1 |
| | Decimals on the Number Line |
|  Skill Quests | |
| Rational numbers: Tenths & hundredths | Tenths as fractions & decimals |
| | Introducing hundredths as fractions & decimals |
| | Representing tenths & hundredths |
| | Connecting tenths & hundredths |



| | |
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| Comparing tenths and hundredths as fractions or decimals | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |



| | |
|---|--|
| Comparing and ordering numbers with up to two decimal places (e.g. $0.12 < 0.2$, $3.55 < 3.84$) | |
|  Activities | |
| Rational numbers: Decimals & percentages | Decimal Order 1 |
| | Comparing Decimals 1 |
|  Skill Quests | |
| Rational numbers: Compare decimals | Comparing & ordering tenths & hundredths |



| | |
|--|---|
| Memorising and using decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{3}{4}$ and fractions with denominators of 10 or 100 | |
|  Activities | |
| Rational numbers: Decimals & percentages | Convert Decimals to Fractions 2 |
|  Skill Quests | |
| Rational numbers: Decimal equivalence | Decimal equivalents for $\frac{1}{2}$, $\frac{1}{4}$ & $\frac{3}{4}$ |



| | |
|--|--|
| Converting common percentages (10%, 25%, 50%) to fractions and decimals | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Common percentages | Introducing percentages |
| | Converting common percentages to fractions |
| | Converting common percentages to decimals |
| | Percentages, fractions & decimals |



| | |
|--|------------------------------------|
| Dividing one-, and two-digit whole numbers by 10 or 100 to make decimals and identify tenths and hundredths places | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Centimetres and Metres |
|  Skill Quests | |
| Rational numbers: Divide by 10 & 100 | Dividing whole numbers by 10 & 100 |

| | |
|---|---|
| Multiplying numbers with up to two decimal places by 10 and 100 | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Centimetres and Metres |
|  Skill Quests | |
| Rational numbers: Multiply by 10 & 100 | Multiplying decimal numbers by 10 & 100 |


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|---|--------------------------------|
| Comparing fractions where one denominator is a multiple of the other | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Compare/order frac | Comparing & ordering fractions |


| | |
|---|---|
| Recognising families of equivalent fractions | |
|  Activities | |
| Rational numbers: Fractions | Equivalent Fraction Wall 1 |
| | Simplify Fractions |
| | Uneven partitioned shapes 2 |
|  Skill Quests | |
| Rational numbers: Equivalent fractions | Equivalent fractions up to & greater than 1 |

| | |
|---|---|
| Recognising equivalent mixed numbers and improper fractions | |
|  Activities | |
| Rational numbers: Fractions | Counting with Fractions on a Number Line |
| | Mixed and Improper Fractions on a Number Line |
|  Skill Quests | |
| Teacher directed | |

| | |
|---|---|
| Adding and subtracting fractions with the same denominator or when one denominator is a multiple of the other, including improper fractions (e.g. $2/3 + 1/9 = 7/9$) | |
|  Activities | |
| Rational numbers: Fractions | Common Denominator |
| | Subtract Like Fractions |
| | Add: No Common Denominator |
| | Subtract: No Common Denominator |
|  Skill Quests | |
| Rational numbers: Add/subtract fractions | Adding & subtracting fractions up to 1 |
| | Adding/subtracting fractions over 1 whole, models |
| | Adding/subtracting fractions, same |
| | Adding/subtracting mixed numbers, same |

| | |
|--|---|
| | Adding/subtracting fractions, related |
| | Adding/subtracting mixed numbers, related |

| | |
|---|---|
| Adding and subtracting decimals to two decimal places (e.g. $1.31 + 0.22 = 1.53$) | |
|  Activities | |
| Rational numbers: Decimals & percentages | Decimal Complements |
| | Magic Symbols 2 |
| Measuring, perimeter, area, volume & time | Calculate Perimeter of Squares and Rectangles |
| | Perimeter: Triangles |
|  Skill Quests | |
| Rational numbers: Add/subtract decimals | Review adding/subtracting decimals to 1 place |
| | Adding/subtracting decimals to 2 places |
| | Adding/subtracting decimals word problems |



| | |
|--|--------------------------------------|
| Finding a non-unit fraction of a whole number, using multiplication and division facts and where the answer is a whole number (e.g. $\frac{2}{3}$ of 24) | |
|  Activities | |
| Rational numbers: Fractions | Fraction Fruit Sets 1 |
| | Fractions of a Collection 2 |
| | Fraction Length Models 2 |
| | Fraction Word Problems |
|  Skill Quests | |
| Rational numbers: Fraction of a quantity | Finding a fraction of a whole number |



| | |
|---|---|
| Finding a whole set from a fractional part of the set (e.g. if 8 is $\frac{2}{5}$ of a set, what is the whole set?) | |
|  Activities | |
| Rational numbers: Fractions | Fraction Word Problems |
|  Skill Quests | |
| Rational numbers: Find the whole | Identifying a whole set from a fraction |



| | |
|---|---|
| Finding common percentages (10%, 25%, 50%) of whole numbers | |
|  Activities | |
| Rational numbers: Decimals & percentages | Modelling Percentages |
| | Calculating percentages (Mental) |
|  Skill Quests | |
| Rational numbers: Common percentages | Finding common percentages of whole numbers |

| | |
|---|--|
| Finding the whole (100%) when given 25% or 50% | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |

Financial mathematics



| | |
|---|-------------------------------------|
| Calculating the total cost of items costing dollars and cents and the change from the nearest ten dollars | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Financial maths: Calculate cost | Calculating costs of items & change |



| | |
|--|--------------------|
| Representing currency values of mixed dollars and cents using decimal notation | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Financial maths: Represent money | Representing money |



| | |
|--|-------------------------|
| Rounding dollar amounts to the nearest dollar | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Financial maths: Round dollar amounts | Rounding dollar amounts |

Algebra

Equations & relationships

| | |
|---|--|
| Completing number sentences that involve addition and subtraction by using equality (=) and inequality (<, >) symbols (e.g. $2,456 + 203,938$ () $3,456 + 231,930$; $2,456 \times 2$ () $1,228 \times 4$) | |
|  Activities | |
| Equations & relationships | Find the missing number 2 |
|  Skill Quests | |
| Equations: Equality addition/subtraction | Comparing numbers using equality symbols |

| | |
|---|--------------------------------|
| Checking the truth of number sentences and completing open number sentences (e.g. $999,999 - \underline{\quad} = 899,999$) | |
|  Activities | |
| Equations & relationships | Multiply and Divide Problems 1 |
| | Equivalent facts - multiply |
|  Skill Quests | |
| Equations: Open number sentences | Solving open number sentences |

| | |
|---|---|
| Recognising, continuing, creating, and describing growing patterns that change by a constant amount (e.g. 3, 4.5, 6, 7.5 ...) | |
|  Activities | |
| Equations & relationships | Pick the Next Number |
|  Skill Quests | |
| Relationships: Patterns | Recognising & continuing growing patterns |

Measurement

Measuring

Accurately measuring length with a ruler, mass (weight) with scales, capacity with measuring jugs, temperature with a thermometer, and duration with a timer, using appropriate metric or time-based units or a combination of units (e.g. 2 hours and 30 minutes)

Activities

| | |
|---|----------------------------|
| Measuring, perimeter, area, volume & time | Which Unit of Measurement? |
| | Centimetres and Metres |
| | Measuring Length |
| | How Heavy? |

Skill Quests

| | |
|------------------------------|--|
| Measuring: Measuring: Length | Introducing kilometres |
| | Measuring & recording in mm, cm, m, km |
| Measuring: Mass | Measuring & recording in g, kg |
| Measuring: Temperature | Measuring & recording temperature |
| Measuring: Capacity | Estimating & measuring in mL & L |

Converting metric units of length (m and cm)

Activities

| | |
|---|------------------------|
| Measuring, perimeter, area, volume & time | Centimetres and Metres |
|---|------------------------|

Skill Quests

| | |
|---------------------------------------|-------------------------------------|
| Measuring: Converting units of length | Converting units of length (m & cm) |
|---------------------------------------|-------------------------------------|

Approximating the areas of irregular shapes covered with squares, half squares, and partial squares

Activities

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|------------------|--|
| Teacher directed | |
|------------------|--|

Skill Quests

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|--|---|
| Measuring: Area non-rectilinear shapes | Calculating areas of non-rectilinear shapes |
|--|---|

Calculating the areas of rectangles (including squares) using multiplication of side lengths

Activities

| | |
|---|---|
| Measuring, perimeter, area, volume & time | Calculate Areas of Squares and Rectangles |
|---|---|

Skill Quests

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|--------------------------------------|---------------------------------------|
| Measuring: Area using multiplication | Calculating area using multiplication |
|--------------------------------------|---------------------------------------|

Measuring the volumes of rectangular prisms (cuboids) filled with centicubes by determining the number of cubes in each layer and then multiplying by the number of total layers

Activities


| | |
|---|------------------|
| Measuring, perimeter, area, volume & time | How many Blocks? |
|---|------------------|



Skill Quests



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|-------------------------------|---------------------------------|
| Measuring: Volume using cubes | Calculating volumes using cubes |
|-------------------------------|---------------------------------|



Calculating the perimeters of regular polygons and other 2D shapes with straight sides



Activities



| | |
|--|---|
| Measuring, perimeter, area, volume & time | Calculate Perimeter of Squares and Rectangles |
| | Perimeter: Triangles |
| | Perimeter Detectives 1 |
|  Skill Quests | |
| Measuring: Perimeter | Calculating perimeter |

| | |
|--|--|
| Recognising that shapes with the same area can have different perimeters, and vice versa | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Measuring: Perimeter & area | Perimeter & area of rectangles & squares |

| | |
|--|------------------------------|
| Describing and classifying angles and turns using the terms acute, right, obtuse, straight, and reflex | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Comparing Angles |
| | Right Angle Relation |
| | What Type of Angle 2? |
|  Skill Quests | |
| Measuring: Identify & classify angles | Understanding angle concepts |
| | Introducing right angles |
| | Classifying angles |



| | |
|--|-------------------------------|
| Classifying and constructing angles up to 180°, using a protractor | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Measuring: Measure & estimate angles | Measuring & estimating angles |



| | |
|--|-------------------------------------|
| Telling the time on analogue and digital clocks | |
|  Activities | |
| Measuring, perimeter, area, volume & time | What is the Time? |
|  Skill Quests | |
| Measuring: Tell time | Telling time to the minute & second |

| | |
|--|-------------------------------------|
| Finding the duration of periods of time involving a.m. and p.m. notation and 24-hour time | |
|  Activities | |
| Measuring, perimeter, area, volume & time | 24 Hour Time |
| | Time Mentals |
|  Skill Quests | |
| Measuring: Find the duration | Using am & pm notation |
| | Finding duration of periods of time |
| | Using timetables |
| | Using 24-hour time |



Geometry



Shapes

| | |
|---|--|
| Identifying, classifying, and describing the attributes of prisms, using cross sections, faces, edges, and vertices | |
|  Activities | |
| Shape, space & pathways | Faces, Edges and Vertices |
| | What Prism am I? |
|  Skill Quests | |
| Shapes: Properties of prisms | Classifying & sorting prisms by features |



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|---|--|
| Identifying parallel and perpendicular lines, including those forming the sides of polygons | |
|  Activities | |
| Shape, space & pathways | What Line am I? |
|  Skill Quests | |
| Shapes: Parallel & perpendicular lines | Identify & describe parallel & perpendicular lines |

Spatial reasoning

| | |
|---|--------------------------|
| Connecting 3D shapes with nets | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Spatial reasoning: Nets | Exploring nets of prisms |



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|---|-------------------------------|
| Describing the transformations performed (reflections, translations, rotations) on 2D shapes | |
|  Activities | |
| Shape, space & pathways | Transformations |
| | Rotational Symmetry of Shapes |
|  Skill Quests | |
| Spatial reasoning: Transformations | Transformations on 2D shapes |



Pathways

| | |
|---|-----------------------------|
| Interpret and create grid maps to plot positions and pathways, using grid references and directional language, including the four main compass points | |
|  Activities | |
| Shape, space & pathways | What Direction was That? |
| | Coordinate Meeting Place |
|  Skill Quests | |
| Pathways: Positions & pathways on maps | Compass directions |
| | Using grid references |
| | Using simple scales on maps |



Statistics



Developing knowledge from data

| | |
|---|--|
| Collecting continuous numerical data by taking measurements, and then applying specified rounding rules | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Data: Collect & sort data | Understanding how to collect & sort data |



| | |
|---|---------------------------|
| Collecting bivariate data with two categorical variables (e.g. what students in our class do at lunch time, and their gender) | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Data: Collect bivariate data | Collecting bivariate data |



Visualisation of data



| | |
|---|------------------------------|
| Creating tables for continuous numerical data, using groupings (e.g. 0–0.99, 1–1.99, 2–2.99) | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Data: Create tables for data | Using tables to display data |

| | |
|---|-------------------------------|
| Creating clustered bar graphs for paired categorical data | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Data: Bar graphs | Creating clustered bar graphs |

Interpretation of data



| | |
|---|----------------------|
| Answering questions about the frequency of particular values or groups of values from a table for continuous numerical data | |
|  Activities | |
| Statistics & probability | Line Graphs: Reading |
| | Histograms |
|  Skill Quests | |
| Teacher directed | |



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|--|---------------------|
| Answering questions about bivariate data in which a specific category in one variable appears more frequently than a specific category in another variable | |
|  Activities | |
| Statistics & probability | Interpreting Tables |
|  Skill Quests | |
| Teacher directed | |



| | |
|---|----------------------------------|
| Interpreting data visualisations | |
|  Activities | |
| Statistics & probability | Interpreting Tables |
| | Bar Graphs 1 |
| | Line Graphs: Reading |
| | Histograms |
|  Skill Quests | |
| Statistics: Interpret data displays | Using & evaluating data displays |

Probability

Experimental probability

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|--|---|
| Conducting repeated chance experiments or games, identifying the outcomes, and describing differences between them using likelihood vocabulary | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Probability: Experiments | Investigating chance experiments |
| | Understanding fair/unfair in chance experiments |



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|---|-------------------------|
| Identifying the likelihood of an everyday event as being impossible, unlikely, even-chance, likely, or certain (e.g. the event 'the sun will rise tomorrow' is certain) | |
|  Activities | |
| Statistics & probability | What are the Chances? |
|  Skill Quests | |
| Probability: Likelihood | Language of probability |
| | Describing chance |



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|---|--------------------------|
| Placing everyday events on a number line according to their likelihood (e.g. placing the event 'you will eat something later today' between 1/2 and 1 as 'likely' or 'very likely') | |
|  Activities | |
| Statistics & probability | Probability Scale |
|  Skill Quests | |
| Probability: Number line | Ordering chance outcomes |



Phase 2, Year 6



Number



Number structure



| | |
|--|--------------------------------|
| Reading, writing, comparing, and ordering any whole number and representing them using base 10 structure | |
|  Activities | |
| Number structure: Whole number & place value | Place Value - Millions |
| | Place Value to Billions |
| | Numbers from Words to Digits 2 |
| | Equal, Less or Greater than? |
| | Expanded Notation |
| | Partition and Rename 3 |
|  Skill Quests | |
| Number structures: Numbers of any size | Reading & writing numbers |
| | Place value |
| | Comparing & ordering numbers |



| | |
|---|-----------------|
| Finding factor pairs for numbers that result from multiplying any two whole numbers between 1 and 12 | |
|  Activities | |
| Operations: Multiplication & division | Multiples of |
| | Find the Factor |
|  Skill Quests | |
| Number structures: Factor pairs | Factor pairs |

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|--|--|
| Rounding whole numbers to the nearest million, hundred thousand, ten thousand, thousand, hundred, or ten | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Number structures: Round to powers of 10 | Rounding whole numbers to powers of 10 |



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|---|--|
| Rounding hundredths to the nearest whole number or tenth | |
|  Activities | |
| Rational numbers: Fractions & decimals | Nearest Whole Number |
| | Rounding Decimals 1 |
|  Skill Quests | |
| Number structures: Round hundredths | Rounding hundredths, nearest tenth or whole number |



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|---|----------------------------|
| Recognising square and cube numbers and the notation for squared (2) and cubed (3) | |
|  Activities | |
| Number structure: Whole number & place value | Square Roots |
|  Skill Quests | |
| Number structures: Recognise square/cube | Recognising square numbers |
| | Recognising cube numbers |


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|---|-------------------------------|
| Memorising the square numbers to 144 and cube numbers to 125 | |
|  Activities | |
| Number structure: Whole number & place value | Square Roots |
|  Skill Quests | |
| Number structures: Find squares & cubes | Finding square & cube numbers |

| | |
|---|--|
| Counting forwards and backwards with positive whole numbers, including working with negative numbers (e.g. starting at -6 and counting backwards in 2s) | |
|  Activities | |
| Number structure: Whole number & place value | Integers on a Number Line |
|  Skill Quests | |
| Number structures: Integers | Comparing & ordering positive & negative numbers |

Operations

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|---|-----------------------|
| Calculating expressions using the order of operations | |
|  Activities | |
| Operations: Multiplication & division | Order of operations 1 |
|  Skill Quests | |
| Operations: Order of operations | Order of operations |

| | |
|---|---|
| Adding and subtracting any whole numbers | |
|  Activities | |
| Operations: Addition & subtraction | Compensation - Add |
| | Compensation - Subtract |
| | Adding Colossal Columns |
| | Add 3-Digit Numbers: Regroup |
| | Add Multi-Digit Numbers 2 |
| | 2-Digit Differences: Regroup |
| | 3-Digit Differences: 2 Regroupings |
| | 3-Digit Differences with Zeros |
|  Skill Quests | |
| Operations: Add & subtract whole numbers | Adding & subtracting using partitioning |
| | Addition using standard written algorithms |
| | Subtraction using standard written algorithms |
| | Addition & subtraction word problems |

| | |
|---|--|
| Multiplying any whole number by a two-digit number (e.g. 542×12) | |
|  Activities | |
| Operations: Multiplication & division | Multiplication Facts |
| | Double and Halve to Multiply |
| | Mental Methods Multiplication 1 |
| | Grid Methods 2 |
| | Grid Methods 3 |
| | Multiplying Whole Numbers by 10, 100, and 1000 |
| | Multiply: 1-Digit Number |
| | Estimation: Multiply and Divide |

| 👑 Skill Quests | |
|-------------------------------------|--|
| Operations: Mental strategies (x) | Multiplying using an area model |
| | Multiplying by doubling/halving, tripling/thirding |
| | Multiplying using factorising |
| Operations: Vertical strategies (x) | Multiplying using standard written method |
| | Multiplying using long multiplication |
| Operations: Solve problems (x) | Solving multiplication word problems |

Dividing up to five-digit whole numbers by a one-digit divisor, with a remainder (e.g. $1283 \div 5 = 256$, remainder 3)

| 📋 Activities | |
|---------------------------------------|--|
| Operations: Multiplication & division | Division Facts to Twelve |
| | Dividing by 10, 100, 1000 |
| | Mental Methods Division 1 |
| | Rounding Numbers for Division |
| | Estimation: Multiply and Divide |
| 👑 Skill Quests | |
| Operations: Mental strategies (÷) | Dividing using factors |
| | Dividing using partitioning |
| Operations: Vertical strategies (÷) | Dividing using long division |
| | Dividing using standard written method |
| | Division using standard written method 2 |
| Operations: Solve problems (÷) | Choosing efficient strategies to divide |
| | Solving division word problems |

Connecting finding unit fractions of whole numbers to division (with remainders) (e.g. $\frac{1}{6}$ of 31 is equivalent to $31 \div 6 = 5 \frac{1}{6}$)



| 📋 Activities | |
|------------------|--|
| Teacher directed | |
| 👑 Skill Quests | |
| Teacher directed | |



Representing remainders from division as whole numbers, fractions, or rounded decimals, as appropriate to the context



| 📋 Activities | |
|-------------------------------------|--|
| Teacher directed | |
| 👑 Skill Quests | |
| Operations: Representing remainders | Representing remainders as whole numbers |
| | Representing remainders as fractions |



Rational numbers



| Reading, writing, and representing tenths, hundredths, and thousandths as fractions and decimals | |
|--|---|
| 📋 Activities | |
| Rational numbers: Fractions & decimals | Decimal place value |
| | Decimals from Words to Digits 2 |
| | Decimals to Fractions 1 |
| 👑 Skill Quests | |
| Rational numbers: Decimals - thousandths | Tenths, hundredths & thousandths |
| | Understanding & modelling decimals to thousandths |



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|---|--|
| Comparing and ordering numbers with up to three decimal places | |
|  Activities | |
| Rational numbers: Fractions & decimals | Comparing Decimals |
| | Decimal Order |
|  Skill Quests | |
| Rational numbers: Compare/order decimals | Compare & order decimals to three places |



| | |
|---|--|
| Memorising decimal and percentage equivalents of common fractions (1/2, 1/4, 3/4, 1/5, 2/5, 3/5, 4/5) including fractions with denominators that are 10, or 100 | |
|  Activities | |
| Rational numbers: Fractions, decimals & percents | Common Fractions as Percentages (AU) |
| | Fractions to Percentages (Non-Calculator) |
| | Percentages to Fractions (with and without simplification) |
| | Match Decimals and Percentages |
|  Skill Quests | |
| Rational numbers: Equivalence | Finding decimal equivalents of common fractions |
| | Finding percentage equivalents of common fractions |



| | |
|---|--|
| Converting decimal tenths and hundredths to fractions and percentages (e.g. $0.31 = 31/100 = 31\%$) | |
|  Activities | |
| Rational numbers: Fractions, decimals & percents | Decimals to percentages |
|  Skill Quests | |
| Rational numbers: FDP | Converting fractions & decimals to percentages |
| | Equivalence fractions, decimals & percentages |



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|--|---------------------------------------|
| Multiplying and dividing numbers by 10, 100, or 1,000 to make decimals and whole numbers (e.g. $1.3 \times 10 = 13$) and to identify tenths, hundredths, and thousandths places | |
|  Activities | |
| Rational numbers: Fractions & decimals | Multiply Decimals 10 100 1000 |
| | Divide Decimals: 10, 100, 1000 |
|  Skill Quests | |
| Rational numbers: Mult/div by 10 & 100 | Dividing numbers by 10 |
| | Multiplying numbers by 10, 100 & 1000 |



| | |
|---|------------------------------|
| Finding equivalent fractions | |
|  Activities | |
| Rational numbers: Fractions & decimals | The Equivalent Fraction |
| | Simplify Fractions |
|  Skill Quests | |
| Rational numbers: Equivalent fractions | Finding equivalent fractions |



| | |
|---|--------------------------------|
| Comparing and ordering fractions where at least one denominator is a common multiple of all the others | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Rational numbers: Compare/order frac | Comparing & ordering fractions |


| | |
|---|---|
| Converting between mixed numbers and improper fractions | |
|  Activities | |
| Rational numbers: Fractions & decimals | Mixed and improper fractions on the number line |
| | Converting Mixed and Improper |
|  Skill Quests | |
| Rational numbers: Improper & mixed | Exploring fractions greater than 1 |
| | Converting improper fractions & mixed numbers |

| | |
|---|----------------------------------|
| Adding and subtracting fractions and mixed numbers when one denominator is a multiple of the other | |
|  Activities | |
| Rational numbers: Fractions & decimals | Add: No Common Denominator |
| | Subtract: No Common Denominator |
| | Add Unlike Mixed Numbers |
|  Skill Quests | |
| Add/subtract same denominator | Adding/subtracting fractions |
| Add/subtract related denominator | Adding/subtracting fractions |
| | Adding/subtracting mixed numbers |

| | |
|---|---|
| Adding and subtracting decimals to three decimal places | |
|  Activities | |
| Rational numbers: Fractions & decimals | Add decimals 1 |
| | Subtracting Decimals |
|  Skill Quests | |
| Rational numbers: Add/sub decimals | Adding & subtracting decimals word problems |
| | Adding & subtracting decimals to 3 decimal places |

| | |
|---|--------------------------------------|
| Finding a non-unit fraction of a whole number, using multiplication and division facts and where the answer is a whole number (e.g. $\frac{2}{3}$ of 240) | |
|  Activities | |
| Rational numbers: Fractions & decimals | Fraction Word Problems |
| | Fraction Fruit Sets 2 |
|  Skill Quests | |
| Rational numbers: Fraction of an amount | Finding a fraction of a whole number |

| | |
|---|---|
| Finding a whole set or amount when given a non-unit fraction, using multiplication and division facts (e.g. $\frac{3}{4}$ of the set is 90, what is the whole set?) | |
|  Activities | |
| Rational numbers: Fractions & decimals | Fraction Word Problems |
|  Skill Quests | |
| Rational numbers: Find the whole | Identifying a whole set from a fraction |

| | |
|---|---|
| Finding common percentages (1%, 10%, 20%, 25%, 50%, 75%) of whole numbers | |
|  Activities | |
| Rational numbers: Fractions, decimals & percents | Calculating percentages (Mental) |
| | Percentage of an amount using Fractions (<100%) |

| | |
|---|--|
| | Percentage Word Problems |
| 👑 Skill Quests | |
| Rational numbers: Percent of an amount | Finding a percentage of a whole number |

| | |
|---|--------------------------|
| Finding the whole (100%) when given a percentage (e.g. 75% is 24) | |
| 📋 Activities | |
| Rational numbers: Fractions, decimals & percents | Percentage Word Problems |
| 👑 Skill Quests | |
| Teacher directed | |

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|---|---|
| Reasoning proportionally with fractions, decimals, and percentages to compare two quantities and determine missing values | |
| 📋 Activities | |
| Rational numbers: Fractions, decimals & percents | Calculating percentages (Mental) |
| | Percentage of an amount using Fractions (<100%) |
| | Percentage Word Problems |
| 👑 Skill Quests | |
| Teacher directed | |

Financial mathematics



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|---|--|
| Calculating 10%, 25%, and 50% of whole dollar amounts (e.g. 50% of \$280) | |
| 📋 Activities | |
| Teacher directed | |
| 👑 Skill Quests | |
| Financial maths: Percents of amounts | Calculating 10%, 25% & 50% of whole dollar amounts |



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| Investigating questions involving purchases (e.g. ensuring there's enough money) | |
| 📋 Activities | |
| Teacher directed | |
| 👑 Skill Quests | |
| Financial maths: Financial plans | Solving problems involving purchases |
| | Creating simple financial plans |



Algebra

Equations & relationships

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| Checking the truth of and completing open number sentences that involve all four operations and that include the use of inequalities, respecting the order of operations (e.g. $8 \times 7 \leq 8 \times 5 + 42$, true or false?) | |
| 📋 Activities | |
| Algebra: Equations & relationships | Missing Numbers: \times and \div facts |
| | Equivalent Facts: Multiply |
| | Find the Missing Number 2 |
| | Missing Values |
| | Magic Symbols 1 |
| 👑 Skill Quests | |
| Equations: Equality & inequality | Using equality & inequality to solve problems |



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|---|--------------------------------|
| Developing a rule for a growing pattern in words and making conjectures about further elements in the pattern | |
|  Activities | |
| Algebra: Equations & relationships | Table of Values |
|  Skill Quests | |
| Relationships: Growing patterns | Investigating growing patterns |



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| Locating coordinate points on a coordinate plane, including points found on the x - or y -axis | |
|  Activities | |
| Algebra: Equations & relationships | Coordinate Graphs |
| | Graphing from a Table of Values |
|  Skill Quests | |
| Relationships: Locate coordinate points | Locating coordinate points on a coordinate plane |

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| Generating a table of values from a rule for a growing pattern and plotting these points on a coordinate plane | |
|  Activities | |
| Algebra: Equations & relationships | Table of Values |
| | Graphing from a Table of Values |
|  Skill Quests | |
| Relationships: Tables of values | Generating a table of values for a growing pattern |

Measurement

Measuring

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|--|---------------------------------------|
| Accurately measuring length with a ruler, mass (weight) with scales, capacity with measuring jugs, temperature with a thermometer, and duration with a timer, using appropriate metric or time-based units or a combination of units (e.g. 2 hours and 30 minutes) | |
|  Activities | |
| Measuring, perimeter, area, volume & time | What's the Temperature (Celsius)? |
| | Measuring Length |
| | Perimeter: Squares and Rectangles |
|  Skill Quests | |
| Measuring: Length | Measuring & recording length |
| | Comparing & ordering length |
| | Selecting appropriate units of length |
| Measuring: Mass | Measuring & recording mass |
| | Comparing & ordering mass |
| | Solving mass problems |
| Measuring: Temperature | Measuring & recording temperature |
| Measuring: Capacity | Measuring capacity |
| | Solving capacity problems |

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| Estimating (using benchmarks) length, mass (weight), capacity, temperature, and duration, using appropriate metric or time-based units or a combination of units | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Measuring: Estimate capacity | Estimating capacity |

Converting metric units of length (m and cm), mass (g and kg), and capacity (L and mL), including combining mixed units to produce units with up to 2 decimal places (e.g. 10 kg and 500 g = 10.5 kg)

Activities

Measuring, perimeter, area, volume & time

Centimetres and Metres

Converting cm and mm

Grams and Kilograms Conversion

Skill Quests

Measuring: Convert units of measure

Solving conversion measurement problems

Converting units of length

Converting units of mass

Converting units of capacity

Classifying, measuring, and constructing angles up to 360°, using a protractor

Activities

Measuring, perimeter, area, volume & time

Measuring Angles

Skill Quests

Measuring: Classify & measure angles

Classifying angles

Measuring angles

Identifying and describing angles at a point, angles on a straight line, and vertically opposite angles, using angle notation

Activities

Measuring, perimeter, area, volume & time

Angles of revolution: Unknown Values

Vertically Opposite Angles: Unknown Values

Skill Quests

Teacher directed

Reasoning about and finding unknown angles in situations involving angles at a point, angles on a straight line, and vertically opposite angles

Activities

Measuring, perimeter, area, volume & time

Angles of revolution: Unknown Values

Vertically Opposite Angles: Unknown Values

Skill Quests

Measuring: Find unknown angles

Adjacent angles

Angles on a straight line

Vertically opposite angles

Visualising, estimating, and calculating (using multiplication) the areas of rectangles and right-angled triangles (in cm² and m²) and the volumes of rectangular prisms (in cm³)

Activities

Measuring, perimeter, area, volume & time

Area: Squares and Rectangles

Volume of Solids and Prisms - 1cm³ blocks

Volume: Rectangular Prisms 1

Skill Quests



Measuring: Calculate area



Calculating the area of rectangles



Calculating the area of right-angled triangles



Measuring: Volume using multiplication



Calculating the volume of rectangular prisms

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|--|---|
| Calculating, estimating, and comparing the volumes of cubes and rectangular prisms using standard units, including cubic centimetres (cm ³) and cubic metres (m ³) | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Volume of Solids and Prisms - 1cm ³ blocks |
| | Volume: Rectangular Prisms 1 |
|  Skill Quests | |
| Measuring: Volume using standard units | Calculating volumes using standard units |

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|---|--------------------------------------|
| Converting between units of time (h, min, s) | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Time Conversions: Whole Numbers 2 |
|  Skill Quests | |
| Measuring: Convert units of time | Converting units of time (h, min, s) |


| | |
|---|-----------------------------------|
| Measuring duration in both 12- and 24-hour time systems | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Time Conversions: Whole Numbers 2 |
|  Skill Quests | |
| Measuring: Use 12- and 24-hr time | Using 24-hour time |

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|---|-------------------------------|
| Finding elapsed time in minutes across an hour (e.g. the difference between 2:53 pm and 3:28 pm) | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Elapsed Time |
|  Skill Quests | |
| Time: Solve elapsed time problems | Solving elapsed time problems |

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|---|------------------|
| Using and interpreting timetables to calculate the duration of events (e.g. bus and train schedules) | |
|  Activities | |
| Measuring, perimeter, area, volume & time | Using Timetables |
|  Skill Quests | |
| Measuring: Use timetables | Using timetables |

Geometry

Shapes

| | |
|---|--|
| Identifying, classifying, and explaining similarities and differences between 2D shapes (including different types of triangles and quadrilaterals) and between prisms and pyramids | |
|  Activities | |
| Geometry: Shape, space & pathways | Collect More Shapes |
| | Collect the Objects 2 |
| | Sides, Angles and Diagonals |
| | Properties of Quadrilaterals |
| | Faces, Edges and Vertices of 3D Shapes |
| | Prisms and Pyramids |
| | What Prism am I? |

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| | What Pyramid am I? |
| | Triangle Tasters |
| 👑 Skill Quests | |
| Shapes: Identify & classify 2D shapes | Classifying 2D shapes |
| Shapes: Prisms & pyramids | Comparing & naming prisms |
| | Comparing & naming pyramids |
| | Comparing prisms & pyramids |

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|--|--------------------------------------|
| Identifying and describing the interior angles of triangles and quadrilaterals | |
| 📋 Activities | |
| Geometry: Shape, space & pathways | Triangle Tasters |
| | Classifying Angles |
| | Angle Measures in a Triangle |
| 👑 Skill Quests | |
| Shapes: Classify shapes by angles | Classifying triangles by angles |
| | Classifying quadrilaterals by angles |

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|--|---------------------|
| Identifying shapes with rotational symmetry and determining their order of rotational symmetry | |
| 📋 Activities | |
| Geometry: Shape, space & pathways | Rotational Symmetry |
| 👑 Skill Quests | |
| Shapes: Rotational symmetry | Rotational symmetry |

Spatial reasoning

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|--|---|
| Visualising, creating, and describing 2D geometric patterns and tessellations using rotation, reflection, and translation, and identifying the properties of the shapes that do not change | |
| 📋 Activities | |
| Teacher directed | |
| 👑 Skill Quests | |
| Spatial reasoning: Tessellations | Recognising tessellations |
| | Creating patterns using transformations |

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|--|--------------------------|
| Predicting the results of two-step transformations (reflections, translations, rotations) on 2D shapes | |
| 📋 Activities | |
| Geometry: Shape, space & pathways | Transformations |
| 👑 Skill Quests | |
| Spatial reasoning: Transformation | Two-step transformations |

Pathways

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|---|---------------------------------|
| Interpret and create grid references and simple scales on maps, using directional language including the four main compass points, turn (in degrees), and distance (in m, km) to locate and describe positions and pathways | |
| 📋 Activities | |
| Geometry: Shape, space & pathways | What direction was that? |
| | Coordinate Graphs: 1st Quadrant |

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|---|-------------------------------------|
| | Scale |
| | Scale Factor |
| 👑 Skill Quests | |
| Pathways: Grid references & map scales | Using simple scales on maps |
| | Using grid references & coordinates |
| Pathways: Positions & pathways | Using cardinal compass directions |

Statistics

Developing knowledge from data

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|---|--|
| Collecting time-series data (e.g. how the mass of a kilogram of carrots varies over 5 days) | |
| 📋 Activities | |
| Teacher directed | |
| 👑 Skill Quests | |
| Teacher directed | |

| | |
|---|----------------------|
| Calculating the mean for numerical data | |
| 📋 Activities | |
| Statistics & probability | The Mean |
| 👑 Skill Quests | |
| Statistics: Calculate the mean | Calculating the mean |



| | |
|--|-------------------------|
| Calculating the range for numerical data | |
| 📋 Activities | |
| Statistics & probability | Data Extremes and Range |
| 👑 Skill Quests | |
| Statistics: Calculate the range | Calculating the range |



Visualisation of data



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|---------------------------------------|---|
| Creating time-series graphs | |
| 📋 Activities | |
| Teacher directed | |
| 👑 Skill Quests | |
| Statistics: Time-series graphs | Representing/reading data in line graphs |
| | Representing/reading data in dot plots |
| | Representing/reading data in pie charts |
| | Representing/reading data in clustered bar graphs |
| | Representing/reading stem-and-leaf graphs |

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| Choosing and creating an appropriate data visualisation for a given set of data | |
| 📋 Activities | |
| Teacher directed | |
| 👑 Skill Quests | |
| Statistics: Data visualisations | Representing/reading data in strip graphs |
| | Representing/reading data in bar graphs |

Interpretation of data



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|---|--|
| Identifying whether a time-series graph shows a trend | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |



| | |
|---|--|
| Calculating an average and a range for continuous numerical data | |
|  Activities | |
| Teacher directed | |
|  Skill Quests | |
| Teacher directed | |


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|---|--|
| Interpreting data visualisations, including those from contemporary media | |
|  Activities | |
| Statistics & probability | Reading from a Column Graph |
| | Histograms |
| | Line Graphs: Reading |
| | Pie Charts |
|  Skill Quests | |
| Statistics: Interpret data in tables | Interpreting data from tables |
| | Interpreting bivariate data & 2-way tables |
| Statistics: Evaluate data displays | Using & evaluating data displays |
| | Examining data displays for misleading information |


Probability



Experimental probability

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|---|--------------------------|
| Listing the sample space of an event (e.g. the sample space for rolling a die is 1, 2, 3, 4, 5, 6) | |
|  Activities | |
| Statistics & probability | How many Combinations? |
|  Skill Quests | |
| Sample space | Identifying sample space |

| | |
|---|---|
| Calculating the probabilities of individual outcomes | |
|  Activities | |
| Statistics & probability | Introductory probability |
| | Find the probability |
|  Skill Quests | |
| Find probability of single event | Finding the probability of a single event |

| | |
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| Calculating probabilities using a spinner, where each event is a fraction or combination of fractions on the spinner | |
|  Activities | |

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| Teacher directed |
|  Skill Quests |
| Teacher directed |

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| Answering questions about the probability of combinations of outcomes, including checking that the sum of all the probabilities is 1 | |
|  Activities | |
| Statistics & probability | How many Combinations? |
|  Skill Quests | |
| Probability of combination of outcomes | Probability of combination of outcomes |



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