Mathletics
Victorian Curriculum
Activities (Courses) and Skill Quests

Years 3-6

January 2024

Mathletics

Grade 3

1 Number

VC2M3N01	
Identify, explain and use the properties of odd and even numbers	
Skill Quests	**Skills**
Odd & even numbers	Exploring odd & even numbers
Course Topic	**Activities Title**
Read & write numbers to 10 000	Odd and Even Numbers 1

VC2M3N02	
Recognise, represent and order natural numbers using naming and writing conventions for numerals beyond 10 000	
Skill Quests	**Skills**
Numbers up to 10 000	Identifying & counting numbers to 4 digits
	Reading & representing numbers to 4 digits
	Comparing & ordering numbers to 4 digits
	Place value to 4 digits
	Partitioning numbers to 4 digits
	Rounding numbers to 4 digits
Numbers up to 100 000	Comparing & ordering numbers to 5 digits
	Place value to 5 digits
	Partitioning numbers to 5 digits
	Rounding numbers to 5 digits
Numbers up to 1 000 000	Reading & representing numbers to 6 digits
	Comparing & ordering numbers to 6 digits
	Place value to 6 digits
	Partitioning numbers to 6 digits
	Counting by ones, tens & hundreds
Numbers of any size	Reading & representing numbers of any size
	Comparing & ordering numbers of any size
	Place value of numbers of any size
	Partitioning numbers of any size
Course Topic	**Activities Title**
Read & write numbers to 10 000	Place Value 3
	Place Value – Thousands
	Partition and Rename 2
	Partition and Rename 3
	Ascending Order
	Descending Order
	Smallest and largest numbers
	Numbers from Words to Digits 1
	Rounding Numbers

VC2M3N03

Recognise and represent unit fractions including 1/2, 1/3, 1/4, 1/5 and 1/10 and their multiples in different ways; combine fractions with the same denominator to complete the whole

Skill Quests	Skills
Fraction symbols	Exploring the meaning of fraction symbols
	Introducing terms numerator & denominator
Find & count in halves & quarters	Finding half of a set or quantity (symbols)
	Finding quarters of sets or shapes (symbols)
	Finding halves & quarters (symbols)
	Counting in halves & quarters to 1
Introduce eighths	Introducing eighths
	Using fractions: halves, quarters & eighths
Introduce thirds	Introducing thirds
	Using fractions: halves, thirds & quarters
Introduce sixths	Introducing sixths
Introduce fifths	Introducing fifths
Introduce tenths	Introducing tenths

Course Topic	Activities Title
Unit fractions	Shade fractions
	Identifying Fractions on a Number Line
	Fractions of a Collection 1
	Fraction Length Models 1
	Unit Fractions

VC2M3N04

Add and subtract two- and three-digit numbers using place value to partition, rearrange and regroup numbers to assist in calculations without a calculator

Skill Quests	Skills
Addition & subtraction using place value	Add & subtract using number facts within 1000
	Add & subtract 2- & 3-digit using jump strategy
	Add & subtract 2- & 3-digit using place value
	Add & subtract 2- & 3-digit using bridging to 10
	Adding & subtracting - bridging with unknowns
	Adding & subtracting 3-digits using partitioning
	Adding & subtracting 3-digits using place value
	Add & subtract 2- & 3-digit using split strategy
	Add & subtract 2-digit rounding & compensation
	Add & subtract 3-digit rounding & compensation
	Adding & subtracting to make 100
	Add & subtract multiples of 100, 1000 & 10 000
	Add & subtract using non-standard partitioning
	Add & subtract: choosing efficient strategies

Course Topic	Activities Title
Add & subtract to 3 digits	Add 3 Numbers: Bonds to 100
	Partition Puzzles 2
	Repartition to Subtract
	Nearest 1000?
	Estimation: Add and Subtract
	Estimate Differences
	Estimate Sums
	Bar Model Problems 1
	Bar Model Problems 2

VC2M3N05

Multiply and divide one- and two-digit numbers, representing problems using number sentences, diagrams and arrays, and using a variety of calculation strategies

Skill Quests	Skills
Multiplication & division	Using repeated addition to multiply
	Using repeated subtraction to divide
	Relating multiplication & division
	Interpreting & solving mult/div word problems
	Multiplication strategies: 1-digit numbers
	Multiplying 2-digit numbers by a 1-digit number

Course Topic	Activities Title
Multiply & divide by 2 digits	Related Facts 2
	Frog Jump Multiplication
	Frog Jump Division
	Equivalent Facts: Multiply
	Divide Into Equal Groups

VC2M3N06

Estimate the quantity of objects in collections and make estimates when solving problems to determine the reasonableness of calculations

Skill Quests	Skills
Estimation strategies	Estimating additions
	Estimating subtractions
	Judging the reasonableness of answers

Course Topic	Activities Title
Add & subtract to 3 digits	Estimation: Add and Subtract
	Estimate Differences
	Estimate Sums

VC2M3N07

Recognise the relationships between dollars and cents and represent money values in different ways

Skill Quests	Skills
Money	Recognising Australian notes & coins
	Counting Australian dollars & cents
	Using money to make purchases

Course Topic	Activities Title
Teacher directed	

VC2M3N08

Use mathematical modelling to solve practical problems involving additive and multiplicative situations, including financial contexts; formulate problems using number sentences and choose calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation

Skill Quests	Skills
Solve practical problems	Solving addition & subtraction practical problems
	Solve multiplication & division practical problems
	Missing number problems using all four operations

Course Topic	Activities Title
Multiply & divide by 2 digits	Frog Jump Multiplication
	Frog Jump Division
	Divide Into Equal Groups

VC2M3N09
Follow and create algorithms involving a sequence of steps and decisions to investigate numbers; describe any emerging patterns

Skill Quests	Skills
Create algorithms to investigate numbers	Identifying & creating number patterns
	Working with code to create algorithms

Course Topic	Activities Title
Read & write numbers to 10 000	Odd and Even Numbers 1

2 Algebra

VC2M3A01

Recognise and explain the connection between addition and subtraction as inverse operations, apply to partition numbers and find unknown values in number sentences

Skill Quests	Skills
Addition & subtraction relationship	Relationship between addition & subtraction
	Equivalent number sentences
	Word problems for finding unknown quantities
	Representing add & subtract using a bar model
Course Topic	Activities Title
Patterns with numbers	Related Facts 1
	Adding in any order

VC2M3A02

Extend and apply knowledge of addition and subtraction facts to 20 to develop efficient mental strategies for computation with larger numbers without a calculator

Skill Quests	Skills
Apply knowledge of facts to 20	Finding fact families
	Numbers bonds to 20
	Applying facts to 20 to larger numbers
Course Topic	Activities Title
Patterns with numbers	Complements to 10, 20, 50
	Complements to 50 and 100

VC2M3A03

Recall and demonstrate proficiency with multiplication facts for 3, 4, 5 and 10; extend and apply facts to develop the related division facts

Skill Quests	Skills
Multiplication & division facts for 2	Recalling multiplication & division facts for 2
Multiplication & division facts for 10	Exploring multiplication by 10
	Recalling multiplication & division facts for 10
Multiplication & division facts for 5	Exploring multiplication by 5
	Recalling multiplication & division facts for 5
Mult/div facts for 2, 5 & 10	Multiplication & division facts for 2, 5, 10
Multiplication & division facts for 3	Exploring multiplication by 3
	Recalling multiplication & division facts for 3
Multiplication & division facts for 4	Exploring multiplication by 4
	Recalling multiplication & division facts for 4
Course Topic	Activities Title
Patterns with numbers	Counting by Fives
	Count by Fives
	Counting by Tens
	Count by Tens
	Count by 2s, 5s and 10s
	Counting up in 4s
	Dividing Fives
	Grouping in Fives

	Dividing Tens
	Grouping in Tens
	Dividing Fours
	Grouping in Fours
	Dividing Threes
	Grouping in Threes
	Skip Counting with Coins

3 Measurement

VC2M3M01	
Identify which metric units are used to measure everyday items; use measurements of familiar items and known units to make estimates	
Skill Quests	**Skills**
Identify metric units of measure	Introducing centimetres
	Introducing millimetres
	Selecting appropriate units to measure length
	Introducing litres
	Introducing millilitres
	Selecting appropriate units to measure capacity
	Introducing kilograms
	Introducing grams
	Selecting appropriate units to measure mass
	Identifying correct units of measurement
Course Topic	**Activities Title**
Length, capacity & mass	Which Unit of Measurement?
	Which Measuring Tool?
	Using a Litre

VC2M3M02	
Measure and compare objects using familiar metric units of length, mass and capacity, and instruments with labelled markings	
Skill Quests	**Skills**
Length, mass & capacity	Comparing, ordering & measuring length
	Comparing, ordering & measuring capacity
	Comparing, ordering & measuring mass
Course Topic	**Activities Title**
Length, capacity & mass	Using a Litre
	How Long is That?
	Measure to the Nearest Half Centimetre
	How Heavy?
	Ordering Mass (g)

VC2M3M03	
Recognise and use the relationship between formal units of time, including days, hours, minutes and seconds, to estimate and compare the duration of events	
Skill Quests	**Skills**
Introduce units of time	Introducing hours
	Introducing minutes
	Introducing seconds
Duration & units of time	Understanding relationship between units of time
	Understanding duration
Course Topic	**Activities Title**
Time: Five minute times & conversions	Five Minute Times
	What is the Time?
	Time Conversions: Whole Numbers 1

VC2M3M04	
Describe the relationship between the hours and minutes on analog and digital clocks, and read the time to the nearest minute	
Skill Quests	**Skills**
Tell time	Telling time to five minutes
	Telling time to the minute
Course Topic	**Activities Title**
Time: Five minute times & conversions	Five Minute Times
	What is the Time?

VC2M3M05	
Identify angles as measures of turn and use right angles as a reference to compare angles in everyday situations	
Skill Quests	**Skills**
Identify & compare angles	Introducing angles
	Introducing right angles
Course Topic	**Activities Title**
Introduction to angles	Equal Angles
	Comparing Angles
	Right Angle Relation

4 Space

VC2M3SP01	
Make, compare and classify objects, identifying key features and explaining why these features make them suited to their uses	
Skill Quests	**Skills**
3D objects	Exploring prisms & pyramids
	Introducing nets
	Recognising & comparing 3D objects
	Describing & sorting 3D objects
	Comparing 2D shapes & 3D objects
Course Topic	**Activities Title**
Classify shapes	How Many Faces?
	How many Edges?
	Count the Corners
	Count Sides and Corners
	Relate Shapes and Solids
	Collect the Objects

VC2M3SP02	
Interpret and create two-dimensional representations of familiar environments, locating key landmarks and objects relative to each other	
Skill Quests	**Skills**
Interpret & create maps	Interpreting simple maps
Course Topic	**Activities Title**
Position	Following Directions
	Coordinate Meeting Place
	Map Coordinates
	Where is it?

5 Statistics

VC2M3ST01
Acquire data for categorical and discrete numerical variables to address a question of interest or purpose by observing, collecting and accessing data sets; record the data using appropriate methods, including frequency tables and spreadsheets

Skill Quests	Skills
Collect & record data	Collecting & recording category data
	Using tables

Course Topic	Activities Title
Sort, represent & interpret data	Tallies
	Sorting Data
	Pictographs
	Column Graphs

VC2M3ST02
Create and compare different graphical representations of data sets, including using software where appropriate; interpret the data in terms of the context

Skill Quests	Skills
Create & compare data representations	Representing & interpreting data displays
	Comparing data displays

Course Topic	Activities Title
Sort, represent & interpret data	Interpreting Tables
	Reading from a Column Graph
	Add and Subtract Using Graphs

VC2M3ST03
Conduct guided statistical investigations involving the collection, representation and interpretation of data for categorical and discrete numerical variables with respect to questions of interest

Skill Quests	Skills
Understand statistical investigations	Introducing the statistical investigation process
	Conducting a statistical investigation

Course Topic	Activities Title
Teacher directed	

6 Probability

VC2M3P01	
Identify practical activities and everyday events that involve chance, and describe possible outcomes and events as 'likely' or 'unlikely' and identify some events as 'certain' or 'impossible', explaining reasoning	
Skill Quests	**Skills**
Language of chance	Using basic probability language
Course Topic	**Activities Title**
Probability	Will it Happen?
	Most Likely and Least Likely
	Introductory probability
	What are the Chances?

VC2M3P02	
Conduct repeated chance experiments; identify and describe possible outcomes, record the results, and recognise and discuss the variation	
Skill Quests	**Skills**
Chance experiments	Conducting chance experiments
Course Topic	**Activities Title**
Probability	How many Combinations?

Grade 4

1 Number

Course Topic	Activities Title
REVIEW Whole Numbers & Place Value	Place Value 3
	Place Value – Thousands
	Partition and Rename 2
	Partition and Rename 3
	Smallest and largest numbers
	Numbers from Words to Digits 1

VC2M4N01	
Recognise and extend the application of place value to tenths and hundredths and use the conventions of decimal notation to name and represent decimals	
Skill Quests	**Skills**
Place value to hundredths	Introducing decimal notation
	Understanding decimal tenths
	Understanding decimal hundredths
	Partitioning decimal hundredths
Connect decimals & fraction	Connecting fractions & decimal notation
Round decimal tenths & hundredths	Rounding decimal tenths & hundredths
Decimals used in money	Understanding decimals used in money
Course Topic	**Activities Title**
Introducing decimals	Decimals from Words to Digits 1
	Decimals on the Number Line
	Decimal Place Value
	Who's got the Money?
	Money

VC2M4N02	
Investigate number sequences involving multiples of 3, 4, 6, 7, 8 and 9	
Skill Quests	**Skills**
Investigating sequences with multiples	Investigating sequences with multiples
Course Topic	**Activities Title**
Patterns in multiplication & division	Grouping in Threes
	Grouping in Fours
	Grouping in Sixes
	Grouping in Sevens
	Grouping in Eights
	Grouping in Nines
	Dividing Threes
	Dividing Fours
	Dividing Sixes
	Dividing Sevens
	Dividing Nines

VC2M4N03	
Find equivalent representations of fractions using related denominators and make connections between fractions and decimal notation	
Skill Quests	**Skills**
Equivalent fractions	Investigating equivalent fractions less than 1
	Investigating equivalent fractions greater than 1
	Patterns in equivalent fractions
	Using multiplication to find equivalent fractions
Course Topic	**Activities Title**
Fractions & equivalents	What Fraction is Shaded?
	What Fraction Is Shaded 1
	What Mixed Number Is Shaded?
	Equivalent Fraction Wall 1
	Equivalent Fraction Wall 2
	Simplifying Fractions
	Thirds and Sixths

VC2M4N04	
Count by multiples of quarters, halves and thirds, including mixed numerals; locate and represent these fractions as numbers on number lines	
Skill Quests	**Skills**
Count by fractions & mixed numerals	Counting in halves & quarters
	Counting in halves, quarters & eighths
	Counting in thirds
	Counting in tenths
	Counting in simple fractions on a number line
Convert fraction types using models	Converting mixed numerals to improper fractions
Course Topic	**Activities Title**
Fractions & equivalents	Partition into Equal Parts
	Counting with Fractions on a Number Line

VC2M4N05	
Solve problems involving multiplying or dividing natural numbers by multiples and powers of 10 without a calculator, using the multiplicative relationship between the place value of digits	
Skill Quests	**Skills**
Mult/div by multiples of 10, 100 & 1000	Using place value to multiply by 10
	Multiplying by multiples of 100
	Multiplying by 1000
	Dividing by multiples of 10
	Dividing by multiples of 100
	Dividing by 1000
Course Topic	**Activities Title**
Patterns in multiplication & division	Multiplying by 10, 100, 1000
	Dividing by 10, 100, 1000

VC2M4N06
Develop efficient mental and written strategies and use appropriate digital tools for solving problems involving addition and subtraction, and multiplication and division where there is no remainder

Skill Quests	Skills
Addition & subtraction using algorithms	Addition algorithms (without regrouping)
	Addition algorithms (with regrouping)
	Addition algorithms (with & without regrouping)
	Subtraction algorithms (without decomposing)
	Subtraction algorithms (with decomposing)
Addition & subtraction strategies	Add & subtract using efficient strategies
	Add & subtract using a bar model
	Add & subtract using place value partitioning
	Add & subtract using jump strategies
	Add & subtract using split strategies
	Add & subtract using round & compensate strategies
Mult & div strategies, no remainder	Multiplication strategies: 1-digit numbers
	Using the conventions of multiplication
	Inverse facts: multiplication & division
	Practising multiplication strategies
	Multiplying 2-digit numbers by a 1-digit number
	Multiplying 2-digit numbers using doubling
	Multiplying 2-digit numbers using factorising
	Selecting effective multiplication strategies
	Selecting effective division strategies
	Comparisons using the language of multiplication
	Dividing a 2-digit number by a 1-digit number

Course Topic	Activities Title
Strategies to add & subtract	Bump Add and Subtract
	Jump Add and Subtract
	Complements to 10, 20, 50
	Split Add and Subtract
	Compensation – Add
	Column Addition 1
	Columns that Subtract
	Subtract Numbers
	Estimate Sums
	Estimate Differences
	Magic Symbols 1
Strategies to multiply & divide	Double and Halve to Multiply
	Fact Families: Multiply and Divide
	Multiplication Arrays
	Arrays 1
	Arrays 2
	Related Facts 2
	Model multiplication to 5×5
	Grid Methods 1
	Problems: Times and Divide

VC2M4N07

Choose and use estimation and rounding to check and explain the reasonableness of calculations, including the results of financial transactions

Skill Quests	Skills
Use estimation & rounding	Rounding & estimating with addition
	Rounding & estimating with subtraction
	Checking accuracy of addition & subtraction
	Estimating with multiplication & division

Course Topic	Activities Title
Strategies to add & subtract	Estimate Sums
	Estimate Differences
Strategies to multiply & divide	Estimation: Multiply and Divide

VC2M4N08

Solve problems involving purchases and the calculation of change to the nearest 5 cents with and without digital tools

Skill Quests	Skills
Solving money problems	Addition & subtraction money problems
	Using estimating with money

Course Topic	Activities Title
Problem solving with models	How much Change?

VC2M4N09

Use mathematical modelling to solve practical problems that involve additive and multiplicative situations, including financial contexts; formulate the problems using number sentences and choose efficient calculation strategies, using digital tools where appropriate; interpret and communicate solutions in terms of the situation

Skill Quests	Skills
Addition & subtraction word problems	Addition & subtraction word problems
	Posing addition & subtraction problems
	Expressing word problems as equations
Multiplication & division word problems	Expressing equations as word problems
	Solving multiplication & division word problems.

Course Topic	Activities Title
Problem solving with models	Bar Model Problems 1
	Bar Model Problems 2
	Fractions of a Collection 1
	Fractions of a Collection 2
	Multiply and Divide Problems 1
	How much Change?

VC2M4N10

Follow and create algorithms involving a sequence of steps and decisions that use addition or multiplication to generate sets of numbers; identify and describe any emerging patterns

Skill Quests	Skills
Sequences & patterns	Exploring number patterns
	Finding & generating shape patterns from a rule

Course Topic	Activities Title
	Generating add/sub patterns from a rule
	Generating multiplication patterns from a rule
	Using a function machine to apply rules to numbers
	Working with code to create algorithms
Teacher directed	

2 Algebra

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<tr><td colspan="2" align="center">VC2M4A01
Find unknown values in numerical equations involving addition and subtraction, using the properties of numbers and operations</td></tr>
<tr><td align="center">Skill Quests</td><td align="center">Skills</td></tr>
<tr><td rowspan="4">Addition & subtraction number sentences</td><td>Using inverse operations for add/sub equations</td></tr>
<tr><td>Relationship between addition & subtraction</td></tr>
<tr><td>Equivalent number sentences</td></tr>
<tr><td>Word problems for finding unknown quantities</td></tr>
<tr><td align="center">Course Topic</td><td align="center">Activities Title</td></tr>
<tr><td rowspan="5">Patterns & missing numbers</td><td>Describing Patterns</td></tr>
<tr><td>Missing Values</td></tr>
<tr><td>I am Thinking of a Number!</td></tr>
<tr><td>Balance Numbers to 20</td></tr>
<tr><td>Odd and Even Numbers 1</td></tr>
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<table>
<tr><td colspan="2" align="center">VC2M4A02
Recall and demonstrate proficiency with multiplication facts up to 10 × 10 and related division facts, and explain the patterns in these; extend and apply facts to develop efficient mental and written strategies for computation with larger numbers without a calculator</td></tr>
<tr><td align="center">Skill Quests</td><td align="center">Skills</td></tr>
<tr><td rowspan="6">Multiplication & division facts</td><td>Multiplication & division facts up to 5</td></tr>
<tr><td>Multiplying & dividing by 6 up to 60</td></tr>
<tr><td>Multiplying & dividing by 7 up to 70</td></tr>
<tr><td>Multiplying & dividing by 8 up to 80</td></tr>
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<tr><td>Multiplying & dividing to 10 x 10</td></tr>
<tr><td align="center">Course Topic</td><td align="center">Activities Title</td></tr>
<tr><td rowspan="18">Patterns in multiplication & division</td><td>Grouping in Threes</td></tr>
<tr><td>Grouping in Fours</td></tr>
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<tr><td>Multiplication Turnarounds</td></tr>
<tr><td>Missing Numbers: × and ÷ facts</td></tr>
<tr><td>Times Tables</td></tr>
<tr><td>Multiply 3 single-digit numbers</td></tr>
<tr><td>Multiplying by 10, 100, 1000</td></tr>
<tr><td>Dividing by 10, 100, 1000</td></tr>
</table>

3 Measurement

VC2M4M01	
Use scaled and digital instruments to interpret unmarked and partial units to measure and compare lengths, masses, capacities, durations and temperatures, using appropriate units	
Skill Quests	**Skills**
Length, mass, capacity & temperature	Metric units of length
	Length & 3D objects
	Measuring temperature
	Measuring capacity in millilitres
	Measuring mass in grams & kilograms
	Reading scales with metric units
Course Topic	**Activities Title**
Using scaled instruments	How Heavy?
	How Long is That?
	Measuring Length
	Measure to the Nearest Half Centimetre
	What's the Temperature (Celsius)?
Perimeter, area & volume	Perimeter of Shapes
	Area of Shapes
	Equal Areas
	Biggest Shape
	How many Blocks?
	Comparing Volume
	Volume of Solids and Prisms - 1 cm3 blocks
Time conversions	What is the Time?
	Time Conversions: Whole Numbers 1
	Time Conversions: Whole Numbers 2
	Time Conversions: Simple Fractions
	Time Conversions: Simple Decimals
Angles	Equal Angles
	Comparing Angles
	Right Angle Relation
	What Type of Angle?

VC2M4M02	
Recognise ways of measuring and approximating the perimeter and area of shapes and enclosed spaces, using appropriate formal and informal units	
Skill Quests	**Skills**
Measure perimeter	Introducing perimeter
	Measuring perimeter
Measure area	Measuring & estimating area using square units
	Introducing area using formal units
	Measuring & comparing regular & irregular shapes
	Measuring area using formal units
Course Topic	**Activities Title**
Perimeter, area & volume	Perimeter of Shapes
	Area of Shapes
	Equal Areas

VC2M4M03	
Solve problems involving the duration of time including situations involving 'am' and 'pm' and conversions between units of time	
Skill Quests	**Skills**
Convert units of time	Converting units of time
Solve duration of time problems	Understanding am & pm notation
	Solving duration of time problems
Course Topic	**Activities Title**
Time conversions	What is the Time?
	Time Conversions: Whole Numbers 1
	Time Conversions: Whole Numbers 2
	Time Conversions: Simple Fractions
	Time Conversions: Simple Decimals

VC2M4M04	
Estimate and compare angles using angle names including acute, obtuse, straight angle, reflex and revolution, and recognise their relationship to a right angle	
Skill Quests	**Skills**
Classify angles	Classifying angles
Course Topic	**Activities Title**
Angles	Equal Angles
	Comparing Angles
	Right Angle Relation
	What Type of Angle?

4 Space

VC2M4SP01	
Explain and compare the geometric properties of two-dimensional shapes and three-dimensional objects	
Skill Quests	**Skills**
Composing & decomposing 2D shapes	Composing & decomposing 2D shapes
Course Topic	**Activities Title**
Shapes & solids	Relate Shapes and Solids
	Collect the Objects 2

VC2M4SP02	
Represent and approximate composite shapes and objects in the environment, using combinations of familiar shapes and objects	
Skill Quests	**Skills**
Identify composite shapes & objects	Identify composite shapes & objects
Course Topic	**Activities Title**
Teacher directed	

VC2M4SP03	
Create and interpret grid reference systems using grid references and directions to locate and describe positions and pathways	
Skill Quests	**Skills**
Create & interpret grid references	Working with grid reference systems
Course Topic	**Activities Title**
Describing position	Coordinate Meeting Place
	Map Coordinates
	Using a key
	What Direction was That?
	More Directions!

VC2M4SP04	
Recognise line and rotational symmetry of shapes and create symmetrical patterns and pictures, using dynamic geometry software where appropriate	
Skill Quests	**Skills**
Line & rotational symmetry	Recognising & drawing line symmetry
	Rotational symmetry
Symmetrical patterns, pictures & shapes	Creating & drawing symmetrical designs
	Recognising tessellations
Course Topic	**Activities Title**
Symmetry	Symmetry
	Symmetry or Not?
	Rotational Symmetry

5 Statistics

VC2M4ST01
Acquire data for categorical and discrete numerical variables to address a question of interest or purpose using digital tools; represent data using many-to-one pictographs, column graphs and other displays or visualisations; interpret and discuss the information that has been created

Skill Quests	Skills
Represent data with many-to-one graphs	Column graphs using many-to-one correspondence
	Picture graphs with many-to-one correspondence

Course Topic	Activities Title
Collect, display & interpret data	Picture Graphs: with scale & half symbols
	Making Picture Graphs: With Scale
	Column Graphs
	Reading from a Column Graph
	Histograms
	Frequency Histograms

VC2M4ST02
Analyse the effectiveness of different displays or visualisations in illustrating and comparing data distributions, then discuss the shape of distributions and the variation in the data

Skill Quests	Skills
Evaluate & compare data displays	Evaluating & comparing data displays

Course Topic	Activities Title
Collect, display & interpret data	Histograms
	Frequency Histograms

VC2M4ST03
Conduct statistical investigations, collecting data through survey responses and other methods; record and display data using digital tools; interpret the data and communicate the results

Skill Quests	Skills
Methods of data collection	Surveys & sorting data

Course Topic	Activities Title
Teacher directed	

6 Probability

VC2M4P01	
Describe possible everyday events and the possible outcomes of chance experiments and order outcomes or events based on their likelihood of occurring; identify independent or dependent events	
Skill Quests	**Skills**
Chance events	Describing the chance of events occurring
	Exploring non-simultaneous everyday events
	Independent & dependent events
Course Topic	**Activities Title**
Probability	Chance Gauge
	What are the Chances?
	Counting Techniques 1

VC2M4P02	
Conduct repeated chance experiments to observe relationships between outcomes in games and other chance situations, and identify and describe the variation in results	
Skill Quests	**Skills**
Chance experiments	Conducting chance experiments
	Investigating equally likely outcomes of chance
Course Topic	**Activities Title**
Teacher aligned	

Grade 5

Course Topic	Activities Title
REVIEW Whole Numbers & Place Value	Place Value to Millions
	Numbers from Words to Digits 1
	Numbers from Words to Digits 2
	Greater Than or Less Than?
	Partition and Rename 3/Understanding Place Value 3 (CAN)
	Expanded Notation
	Place Value 2
	Place Value 3
	Place Value 1
	Who's got the Money?
	Money

1 Number

VC2M5N01		
Interpret, compare and order numbers with more than 2 decimal places, including numbers greater than one, using place value understanding; represent these on a number line		
Skill Quests	**Skills**	
Understand decimals to thousandths	Introducing decimal thousandths	
	Partitioning decimals of any size	
	Comparing & ordering decimals	
	Interpreting zeros at end of decimals	
	Decimal & fraction equivalences	
	Connecting decimals to the metric system	
Course Topic	**Activities Title**	
Decimals	Decimals from Words to Digits 1	
	Decimals on the Number Line	
	Decimal Place Value	
	Nearest Whole Number	

VC2M5N02		
Express natural numbers as products of their factors, recognise multiples and determine if one number is divisible by another		
Skill Quests	**Skills**	
Multiples & factors	Finding multiples	
	Finding factors	
	Solving problems using factors & multiples	
Divisibility tests	Divisibility tests for 2, 5 & 10	
	Divisibility tests for 3, 4, 6, 8 & 9	
Course Topic	**Activities Title**	
Factors & Multiples	Multiples	
	Lowest Common Multiple	
	Factors	
	Highest Common Factor	
	Find the Factor	

	Divisibility Tests (2, 5, 10)
	Divisibility Tests (3, 4, 9)
	Tests of Divisibility 1

VC2M5N03
Compare and order common unit fractions with the same and related denominators, including mixed numerals, applying knowledge of factors and multiples; represent these fractions on a number line

Skill Quests	Skills
Compare & order fractions	Comparing & ordering fractions
	Comparing & ordering fractions & mixed numbers
	Using common factors to simplify proper fractions

Course Topic	Activities Title
Compare & order fractions	Shading Equivalent Fractions
	Equivalent Fraction Wall 2
	Equivalent Fractions on a Number Line 1
	Equivalent Fractions
	Compare Fractions 1a
	Compare Fractions 1b
	Identifying Fractions Beyond 1
	Improper to Mixed
	Mixed to Improper
	Converting Mixed and Improper
	Identifying Fractions on a Number Line
	Mixed and Improper Fractions on a Number Line

VC2M5N04
Recognise that 100% represents the complete whole and use percentages to describe, represent and compare relative size; connect familiar percentages to their decimal and fraction equivalents

Skill Quests	Skills
Fractions, decimals & percentages	Introducing percentages
	Connecting percentages & decimals
	Connecting percentages & fractions
	Relationship - percentages, decimals & fractions

Course Topic	Activities Title
Fractions, decimals & percentages	Modelling Percentages
	Fractions to Decimals
	Percents and Decimals
	Common Fractions as Percentages (AU)
	Decimal Order
	Comparing Decimals

VC2M5N05
Solve problems involving addition and subtraction of fractions with the same or related denominators, using different strategies

Skill Quests	Skills
Add & subtract fractions	Add & subtract proper fractions - same denominator
	Add & subtract mixed numerals - same denominator

Course Topic	Activities Title
	Add & subtract fractions - related denominators
	Add & subtract mixed num - related denominators
Course Topic	**Activities Title**
Add & subtract fractions	Add: Common Denominator
	One Take Fraction
	Subtract: Common Denominator
	Add Subtract Fractions 1
	Common Denominator
	Add Like Mixed Numbers
	Subtract Like Mixed Numbers
Teacher directed for related denominators	

VC2M5N06

Solve problems involving multiplication of larger numbers by one- or two-digit numbers, choosing efficient mental and written calculation strategies and using digital tools where appropriate; check the reasonableness of answers

Skill Quests	Skills
Strategies to multiply by 1- or 2-digits	Multiplication using multiples of 10
	Multiplying: rounding, compensating & partitioning
	Multiplying: doubling, halving & thirding
	Multiplying using the split method
	Multiplying using an area model
	Multiplying by factorising
	Multiplying using expanded algorithm
	Multiplying using contracted algorithm
	Multiplying using extended form of algorithm

Course Topic	Activities Title
Multiply & divide by 2 digits	Multiply Multiples of 10
	Multiply More Multiples of 10
	Multiply 2 Digits Area Model
	Grid Methods 1
	Double and Halve to Multiply
Rounding & estimating	Estimate Products
	Estimation: Multiply and Divide

VC2M5N07

Solve problems involving division, choosing efficient mental and written strategies and using digital tools where appropriate; interpret any remainder according to the context and express results as a whole number, decimal or fraction

Skill Quests	Skills
Division strategies incl. remainders	Dividing by a 1-digit number using partitioning
	Dividing by a 2-digit number using partitioning
	Dividing by a 1-digit number using factorising
	Dividing by a 2-digit number using factorising
	Extended division - no remainders or zeros
	Extended division with remainders
	Extended division with & without remainders
	Contracted division - no remainders or zeros
	Contracted division- no remainders
	Contracted division - with & without remainders

Course Topic	Activities Title
	Dividing by 2-digit numbers - formal algorithms
Multiply & divide by 2 digits	Mental Methods Multiplication 1
	Dividing by 10, 100, 1000
	Division Facts 1
	Remainders by Arrays
	Mental Methods Division 1
	Mental Methods Division
Rounding & estimating	Estimate Quotients
	Estimation: Multiply and Divide

VC2M5N08
Check and explain the reasonableness of solutions to problems, including financial contexts using estimation strategies appropriate to the context

Skill Quests	Skills
Estimation & rounding	Rounding to estimate addition & subtraction
	Rounding to estimate multiplication & division
	Estimating with money

Course Topic	Activities Title
Rounding & estimating	Rounding Numbers
	Rounding Numbers 1
	Estimate Sums
	Estimate Differences
	Estimate Products
	Estimate Quotients
	Estimation: Multiply and Divide
	Estimate Decimal Sums 2
	Estimate Decimal Operations

VC2M5N09
Use mathematical modelling to solve practical problems involving additive and multiplicative situations, including simple financial planning contexts; formulate the problems, choosing operations and efficient mental and written calculation strategies, and using digital tools where appropriate; interpret and communicate solutions in terms of the situation

Skill Quests	Skills
Add & subtract practical problems	Addition & subtraction word problems
	Expressing word problems as equations add/sub
	Solving add & subtract money problems
Multiply & divide practical problems	Multiplication & division word problems
	Expressing word problems as equations mult/div
	Solving mult-step mult/div word problems
	Solving mult & div money problems
All operations practical problems	Express equations as word problems all operations

Course Topic	Activities Title
Solving practical problems	Columns that Add
	Add Two 2-Digit Numbers
	Add 3-Digit Numbers
	Columns that Subtract
	Subtract Numbers

	Multiply: 1-Digit Number
	Multiply: 2-Digit by 1-Digit
	Divide: 1-Digit Divisor 1
	Bar model × ÷
	Problems: Times and Divide

VC2M5N10

Follow a mathematical algorithm involving branching and repetition (iteration); create and use algorithms involving a sequence of steps and decisions and digital tools to experiment with factors, multiples and divisibility; identify, interpret and describe emerging patterns

Skill Quests	Skills
Create & use algorithms	Manipulating numbers using a given rule
	Designing flowcharts to solve add/sub of fractions
	Factors & multiples
Course Topic	**Activities Title**
Missing Values	Equivalent Facts: Multiply
	Missing Values
	Missing Numbers: Variables
	Solve Equations: Multiply, Divide 1
	I am Thinking of a Number!
	Fit the Conditions 1

2 Algebra

<table>
<tr><td colspan="2">VC2M5A01
Recognise and explain the connection between multiplication and division as inverse operations and use this to develop families of number facts</td></tr>
<tr><td>Skill Quests</td><td>Skills</td></tr>
<tr><td>Connect multiplication & division</td><td>Inverse relationship - multiplication & division</td></tr>
<tr><td>Course Topic</td><td>Activities Title</td></tr>
<tr><td rowspan="2">Family of facts</td><td>Fact Families: Multiply and Divide</td></tr>
<tr><td>Multiplication Turnarounds</td></tr>
</table>

<table>
<tr><td colspan="2">VC2M5A02
Find unknown values in numerical equations involving multiplication and division using the properties of numbers and operations</td></tr>
<tr><td>Skill Quests</td><td>Skills</td></tr>
<tr><td>Find unknown values in mult & div</td><td>Finding unknown values - multiplication & division</td></tr>
<tr><td>Course Topic</td><td>Activities Title</td></tr>
<tr><td rowspan="3">Family of facts</td><td>Missing Numbers: × and ÷ facts</td></tr>
<tr><td>Times Tables</td></tr>
<tr><td>Multiply 3 single-digit numbers</td></tr>
</table>

3 Measurement

VC2M5M01	
Choose appropriate metric units when measuring the length, mass and capacity of objects; use smaller units or a combination of units to obtain a more accurate measure	
Skill Quests	**Skills**
Choose appropriate metric units	Introducing kilometres
	Comparing & ordering units of length
	Selecting appropriate units – length
	Comparing & ordering units of mass
	Selecting appropriate units – mass
	Selecting appropriate units – capacity
	Recognising suitable metric units - all
Course Topic	**Activities Title**
Metric conversions	Kilometre Conversions
	Metres and Kilometres
	Millilitres and Litres
	Litre Conversions
	Kilogram Conversions
	Grams and Kilograms

VC2M5M02	
Solve practical problems involving the perimeter and area of regular and irregular shapes using appropriate metric units	
Skill Quests	**Skills**
Perimeter & area - practical problems	Calculating perimeter practical problems
	Calculating area practical problems
Course Topic	**Activities Title**
Perimeter & area	Perimeter: Squares and Rectangles
	Area of Shapes
	Biggest Shape/Bigger or smaller shape
	Equal Areas
	Area: Squares and Rectangles

VC2M5M03	
Compare 12- and 24-hour time systems and solve practical problems involving the conversion between them	
Skill Quests	**Skills**
Use 24-hour time	Using 24-hour notation
	Using 24-hour time in timetables
Course Topic	**Activities Title**
Time problems	Time Conversions: Simple Fractions
	Time Conversions: Simple Decimals
	What Time Will it Be?
	Time Mentals
	Elapsed Time
	24 Hour Time
	Using Timetables

VC2M5M04	
Estimate, construct and measure angles in degrees, using appropriate tools, including a protractor, and relate these measures to angle names	
Skill Quests	**Skills**
Estimate, construct & measure angles	Identifying, estimating & measuring angles
	Classifying & constructing angles
Course Topic	**Activities Title**
Angles	Classifying Angles
	Measuring Angles
	Estimating Angles

4 Space

VC2M5SP01	
Connect objects to their nets and build objects from their nets using spatial and geometric reasoning	
Skill Quests	**Skills**
Connect objects to nets	Connecting prisms & pyramids with their nets
	Connecting 3D objects with their nets
Course Topic	**Activities Title**
Shapes & solids	What Pyramid am I?
	What Prism am I?
	Prisms and Pyramids

VC2M5SP02	
Construct a grid coordinate system that uses coordinates to locate positions within a space; use coordinates and directional language to describe position and movement	
Skill Quests	**Skills**
Use coordinates in a grid system	Working with grid referenced maps
	Using Cartesian coordinate system - first quadrant
	Using landmarks & directional language
Course Topic	**Activities Title**
Position	Map Coordinates
	Coordinate Graphs: 1st Quadrant
	More Directions!

VC2M5SP03	
Describe and perform translations, reflections and rotations of shapes, using dynamic geometry software where appropriate; recognise what changes and what remains the same, and identify any symmetries	
Skill Quests	**Skills**
Identify & describe transformations	Identifying & describing transformations
Course Topic	**Activities Title**
Transformations	Flip, Slide, Turn
	Transformations
	Rotational Symmetry

5 Statistics

VC2M5ST01	
Acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables to address a question of interest or purpose using software including spreadsheets; discuss and report on data distributions in terms of highest frequency (mode) and shape, in the context of the data	
Skill Quests	**Skills**
Acquire, validate & represent data	Conducting surveys or statistical investigations
Understand data distributions	Understanding & calculating the mode
	Introducing the shape of data distribution
Course Topic	**Activities Title**
Collect, display & interpret data	Stem and Leaf Plots: Concept
	Dot Plots
	Divided Bar Graphs
	Tally Charts
	Sector Graphs
	Mode
	Mode from Stem and Leaf Plot
	Mode from Frequency Table
	Grouping data and modal class

VC2M5ST02	
Interpret line graphs representing change over time; discuss the relationships that are represented and conclusions that can be made	
Skill Quests	**Skills**
Interpret line graphs	Interpreting line graphs
Course Topic	**Activities Title**
Collect, display & interpret data	Line Graphs: Interpretation
	Travel Graphs

VC2M5ST03	
Plan and conduct statistical investigations by posing questions or identifying a problem and collecting relevant data; choose appropriate displays and interpret the data; communicate findings within the context of the investigation	
Skill Quests	**Skills**
Teacher directed	
Course Topic	**Activities Title**
Teacher directed	

6 Probability

VC2M5P01	
List the possible outcomes of chance experiments involving equally likely outcomes and compare to those that are not equally likely	
Skill Quests	**Skills**
Outcomes of chance experiments	Investigating equally likely outcomes
	Exploring fair & unfair chance experiments
Course Topic	**Activities Title**
Probability	What are the Chances?
	Chance Gauge
	Introductory probability
	Fair Games

VC2M5P02	
Conduct repeated chance experiments, including those with and without equally likely outcomes, and observe and record the results; use frequency to compare outcomes and estimate their likelihoods	
Skill Quests	**Skills**
Teacher directed	
Course Topic	**Activities Title**
Teacher directed	

Grade 6

Course Topic	Activities Title
REVIEW Whole Numbers & Place Value	Place Value to Millions
	Numbers from Words to Digits 1
	Numbers from Words to Digits 2
	Partition and Rename 3/Understanding Place Value 3 (CAN)
	Expanded Notation
	Place Value 2
	Place Value 3

1 Number

VC2M6N01	
Recognise situations, including financial contexts, that use integers; locate and represent integers on a number line and as coordinates on the Cartesian plane	
Skill Quests	**Skills**
Understand integers	Recognising situations that use integers
	Locating & representing integers on a number line
	Introducing the Cartesian plane
Course Topic	**Activities Title**
Introducing integers	Integers on a Number Line
	Ordering Integers (Number Line)
	Comparing Integers (<, =, >)
	What's the Temperature (Celsius)?

VC2M6N02	
Identify and describe the properties of prime, composite, square and triangular numbers and use these properties to solve problems and simplify calculations	
Skill Quests	**Skills**
Prime & composite numbers	Introducing prime & composite numbers
Square & triangular numbers	Introducing square numbers
	Describing triangular numbers
Course Topic	**Activities Title**
Multiples, factors, primes & composites	Multiples
	Multiples of
	Highest Common Factor
	Lowest Common Multiple
	Prime or Composite?

VC2M6N03	
Apply knowledge of equivalence to compare, order and represent common fractions, including halves, thirds and quarters, on the same number line and justify their order	
Skill Quests	**Skills**
Compare & order common fractions	Recognise, compare & represent common fractions
	Comparing common fractions on a number line

Course Topic	Activities Title
Equivalent fractions	Equivalent Fraction Wall 1
	Equivalent Fraction Wall 2
	Shading Equivalent Fractions
	Identifying Fractions on a Number Line
	Mixed and Improper Fractions on a Number Line
	Equivalent Fractions
	Comparing Fractions 1
	Compare Fractions 1a
	Compare Fractions 1b

VC2M6N04	
Apply knowledge of place value to add and subtract decimals, using digital tools where appropriate; use estimation and rounding to check the reasonableness of answers	
Skill Quests	**Skills**
Add/sub decimals - mental strategies	Adding decimals using mental strategies
	Subtracting decimals using mental strategies
Add/sub decimals - digital technologies	Adding decimals using digital technologies
	Subtracting decimals using digital technologies
Add/sub decimals - written method	Adding decimals using written method
	Subtracting decimals using written method
Add/sub decimals – estimating	Estimating sums & differences of decimals
Course Topic	**Activities Title**
Add & subtract decimals	Decimal Complements
	Adding Decimals
	Subtract Decimals 1
	Estimate Decimal Sums 1
	Estimate Decimal Differences 1
	Estimate Decimal Differences 2

VC2M6N05	
Solve problems involving addition and subtraction of fractions using knowledge of equivalent fractions	
Skill Quests	**Skills**
Add & subtract proper fractions	Adding fractions with related denominators
	Subtracting fractions with related denominators
	Add & subtract fractions - related denominators
Add & subtract mixed numerals	Adding fractions & mixed numerals
	Subtracting fractions & mixed numerals
Course Topic	**Activities Title**
Add & subtract fractions	Add: Common Denominator
	One Take Fraction
	Subtract: Common Denominator
	Add Subtract Fractions 1
	Common Denominator
	Add Like Mixed Numbers
	Subtract Like Mixed Numbers

VC2M6N06

Multiply and divide decimals by multiples of powers of 10 without a calculator, applying knowledge of place value and proficiency with multiplication facts, using estimation and rounding to check the reasonableness of answers

Skill Quests	Skills
Multiply/divide decimals by powers of 10	Multiplying decimals by powers of 10
	Dividing decimals by powers of 10
	Using estimation

Course Topic	Activities Title
Fractions, decimals & percentages	Multiply Decimals: 10, 100, 1000
	Divide Decimals: 10, 100, 1000

VC2M6N07

Solve problems that require finding a familiar fraction, decimal or percentage of a quantity, including percentage discounts, choosing efficient calculation strategies with and without digital tools

Skill Quests	Skills
Find a fraction of a quantity	Finding a fraction of a quantity
Calculate percentages	Calculating percentages

Course Topic	Activities Title
Fractions, decimals & percentages	Fractions to Decimals
	Decimals to Fractions 1
	Percentage to Fraction
	Decimals to percentages
	Common Fractions as Percentages (AU)
	Fractions to Percentages (Non-Calculator)
	Percents and Decimals
	Match Decimals and Percentages
	Calculating Percentages (Mental)
	Fraction Word Problems
	Percentage Word Problems
	Model Fractions to Multiply

VC2M6N08

Approximate numerical solutions to problems involving rational numbers and percentages, using appropriate estimation strategies

Skill Quests	Skills
Rational numbers & percentages	Estimating solutions

Course Topic	Activities Title
Estimating	Estimation: Multiply and Divide
	Estimate Decimal Sums 2
	Estimate Decimal Operations
	Estimate Products with Fractions

VC2M6N09

Use mathematical modelling to solve practical problems involving rational numbers and percentages, including in financial contexts; formulate the problems, choosing operations and using efficient mental and written calculation strategies, and using digital tools where appropriate; interpret and communicate solutions in terms of the situation, justifying the choices made

Skill Quests	Skills
Solve practical percentage problems	Solving practical percentage problems

Course Topic	Activities Title
Solve problems with rational numbers	Money Problems: Four Operations
	Time Conversions: Simple Fractions
	Time Conversions: Simple Decimals

2 Algebra

VC2M6A01
Recognise and use rules that generate visually growing patterns and number patterns involving rational numbers

Skill Quests	Skills
Recognise & use rules for patterns	Continuing & creating number sequences

Course Topic	Activities Title
Patterns, equations & rules	Increasing Patterns
	Describing Patterns
	Find the Pattern Rule
	Table of Values
	Pattern Rules and Tables
	Number Sequences Up to 1 Million

VC2M6A02
Find unknown values in numerical equations involving brackets and combinations of arithmetic operations, using the properties of numbers and operations

Skill Quests	Skills
Understand order of operations	Order of operations with no grouping symbols
	Order of operations using grouping symbols
	Order of operations practical situations

Course Topic	Activities Title
Patterns, equations & rules	Order of Operations 1 (BIDMAS)
	Writing Algebraic Expressions
	Missing Numbers: Variables
	Simple Substitution
	Solve Equations: Add, Subtract 1
	Solve Equations: Multiply, Divide 1

VC2M6A03
Design and use algorithms involving a sequence of steps and decisions that use rules to generate sets of numbers; identify, interpret and explain emerging patterns

Skill Quests	Skills
Design flowcharts to solve problems	Designing flowcharts to solve problems
Use rules & algorithms	Manipulating numbers using a given rule
	Creating algorithms for sets

Course Topic	Activities Title
Teacher directed	

3 Measurement

<table>
<tr><td colspan="2" align="center">VC2M6M01
Convert between common metric units of length, mass and capacity; choose and use decimal representations of metric measurements relevant to the context of a problem</td></tr>
<tr><td align="center">Skill Quests</td><td align="center">Skills</td></tr>
<tr><td rowspan="3">Connect decimals to the metric system</td><td>Decimal notation & the metric system</td></tr>
<tr><td>Decimal representation in capacity</td></tr>
<tr><td>Decimal representation in mass</td></tr>
<tr><td rowspan="3">Convert metric units of measurement</td><td>Converting metric units of length</td></tr>
<tr><td>Converting metric units of capacity</td></tr>
<tr><td>Converting metric units of mass</td></tr>
<tr><td align="center">Course Topic</td><td align="center">Activities Title</td></tr>
<tr><td rowspan="8">Metric conversions</td><td>Grams and Kilograms 1</td></tr>
<tr><td>Grams and Kilograms</td></tr>
<tr><td>Grams and Milligrams</td></tr>
<tr><td>Converting Units of Mass</td></tr>
<tr><td>Centimetres and Metres</td></tr>
<tr><td>Metres and Kilometres</td></tr>
<tr><td>Millilitres and Litres</td></tr>
<tr><td>Converting Volume</td></tr>
</table>

<table>
<tr><td colspan="2" align="center">VC2M6M02
Establish the formula for the area of a rectangle and use it to solve practical problems</td></tr>
<tr><td align="center">Skill Quests</td><td align="center">Skills</td></tr>
<tr><td>Use formula for area of a rectangle</td><td>Using a formula to calculate area of a rectangle</td></tr>
<tr><td align="center">Course Topic</td><td align="center">Activities Title</td></tr>
<tr><td rowspan="2">Area</td><td>Area of Shapes</td></tr>
<tr><td>Area: Squares and Rectangles</td></tr>
</table>

<table>
<tr><td colspan="2" align="center">VC2M6M03
Measure, calculate and compare elapsed time; interpret and use timetables and itineraries to plan activities and determine the duration of events and journeys</td></tr>
<tr><td align="center">Skill Quests</td><td align="center">Skills</td></tr>
<tr><td>Interpret & use timetables</td><td>Interpreting & using timetables</td></tr>
<tr><td align="center">Course Topic</td><td align="center">Activities Title</td></tr>
<tr><td rowspan="5">Time problems</td><td>Time Mentals</td></tr>
<tr><td>Elapsed Time</td></tr>
<tr><td>Using Timetables</td></tr>
<tr><td>Australian Time Zones</td></tr>
<tr><td>What Time Will it Be?</td></tr>
</table>

VC2M6M04	
Identify the relationships between angles on a straight line, angles at a point and vertically opposite angles; use these to determine unknown angles, communicating reasoning	
Skill Quests	**Skills**
Understand angle properties	Understanding adjacent angles
	Exploring vertically opposite angles
	Calculating angles that total 360 ˚
	Investigating supplementary & complementary angles
Course Topic	**Activities Title**
Angle relationships	Measuring Angles
	Estimating Angles
	Angle Sum of a Triangle
	Quadrilaterals: Angle Sum with Equations
	Exterior Angles of a Triangle
	Angles of revolution: Unknown Values
	Vertically Opposite Angles: Unknown Values

4 Space

VC2M6SP01	
Compare the parallel cross-sections of objects and recognise their relationships to right prisms	
Skill Quests	**Skills**
Investigate cross-sections	Investigating cross-sections
Course Topic	**Activities Title**
Teacher directed	

VC2M6SP02	
Locate points in the 4 quadrants of the Cartesian plane; describe changes to the coordinates when a point is moved to a different position in the plane	
Skill Quests	**Skills**
Points on the Cartesian plane	Locating points on the Cartesian plane
Course Topic	**Activities Title**
Working on a Cartesian plane	Ordered Pairs
	Number Plane
	Graphing from a Table of Values
	Reading Values from a Line

VC2M6SP03	
Recognise and use combinations of transformations to create tessellations and other geometric patterns, using dynamic geometry software where appropriate	
Skill Quests	**Skills**
Use combinations of transformations	Recognising tessellations
	Identifying a sequence of 2 transformations
Course Topic	**Activities Title**
Working on a Cartesian plane	Transformations: Coordinate Plane
	Rotations: Coordinate Plane

5 Statistics

VC2M6ST01	
Interpret and compare data sets for ordinal and nominal categorical, discrete and continuous numerical variables using comparative displays or visualisations and digital tools; compare distributions in terms of mode, range and shape	
Skill Quests	**Skills**
Interpret, compare & describe data sets	Two-way tables
	Side-by-side column graphs
	Comparing & selecting bivariate data displays
	Describing & interpreting data sets
Compare mode, range & shape	Understanding mode, range & shape of distributions
	Comparing modes in sets of data
Course Topic	**Activities Title**
Analyse & interpret data	Mode
	Mode from Stem and Leaf Plot
	Mode from Frequency Table
	Data Extremes and Range
	Stem and Leaf Plots with Range
	Double Stem and Leaf Plots
	Line Graphs: Interpretation

VC2M6ST02	
Identify statistically informed arguments presented in traditional and digital media; discuss and critique methods, data representations and conclusions	
Skill Quests	**Skills**
Interpret & evaluate secondary data	Interpreting & evaluating secondary data
Course Topic	**Activities Title**
Teacher directed	

VC2M6ST03	
Plan and conduct statistical investigations by posing and refining questions to collect categorical or numerical data by observation or survey, or identifying a problem and collecting relevant data; analyse and interpret the data and communicate findings within the context of the investigation	
Skill Quests	**Skills**
Teacher directed	
Course Topic	**Activities Title**
Teacher directed	

6 Probability

VC2M6P01	
Describe probabilities using fractions, decimals and percentages; recognise that probabilities lie on numerical scales of 0–1 or 0%–100%; use estimation to assign probabilities that events occur in a given context, using common fractions, percentages and decimals	
Skill Quests	**Skills**
Assign probabilities	Probability as a fraction, decimal or percent
	Probabilities from 0 to 1
Course Topic	**Activities Title**
Probability	Simple Probability
	Probability Scale
	Complementary Events
	Dice and Coins

VC2M6P02	
Conduct repeated chance experiments and run simulations with an increasing number of trials using digital tools; compare observations with expected results and discuss the effect on variation of increasing the number of trials	
Skill Quests	**Skills**
Conduct chance experiments	Conducting chance experiments
Course Topic	**Activities Title**
Teacher directed	

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