Nelson Numeracy Assessment Kit

First to Seventh Year of School

Nelson Numeracy Assessment Kit

correlation to

Queensland Mathematics Syllabus Outcomes

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Nelson Numeracy Assessment Kit

First Year of School correlation to Queensland Mathematics Syllabus Outcomes — Level 1

Please note: the Key Learning Area Outcomes are covered in the assessment tasks.

NAK Strand: NUMBER & PATTERNS

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 1
Section A — COUNTING SET OBJECTS	Number	Number concepts	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses.
Section B — PATTERN RECOGNITION	Number/Patterns and algebra	Number concepts/ Equivalence and equations	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses. **PA1.2** Students compare and describe arrangements of objects and combinations of numbers to 10 using the language of equivalence.
Section C — IDENTIFYING & CONTINUING PATTERNS	Patterns and algebra	Patterns and functions	**PA1.1** Students identify, describe and create patterns and change based on simple rules.
Section D — BASIC CONCEPT LANGUAGE	Space	Location, direction and movement	**S1.2** Students follow and give simple directions to move through, and locate and place objects in, familiar environments.
Section E — COUNTING & COMPARING	Number/Patterns and algebra	Number concepts/ Equivalence and equations	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses. **PA1.2** Students compare and describe arrangements of objects and combinations of numbers to 10 using the language of equivalence.
Section F — 1–1 CORRESPONDENCE	Number	Number concepts	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses.
Section G — NUMBER RECOGNITION	Number	Number concepts	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses.
Section H — WRITING NUMBERS	Number	Number concepts	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses.
Section I — ORDINAL NUMBER	Number	Number concepts	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses.
Section J — COUNTING SEQUENCES	Number	Number concepts	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses.
Section K — NUMBERS BEFORE/AFTER	Number	Number concepts	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses.
Section L — CONSERVATION OF NUMBER	Number/Patterns and algebra	Number concepts/ Equivalence and equations	**N1.1** Students identify, compare and order small whole numbers, make and match representations of these numbers and identify coins, notes and their uses. **PA1.2** Students compare and describe arrangements of objects and combinations of numbers to 10 using the language of equivalence.
Section M — SIMPLE ADDITION (no symbols)	Number	Addition and subtraction	**N1.2** Students identify and solve addition and subtraction problems involving small whole numbers.
Section N — MENTAL ADDITION	Number	Addition and subtraction	**N1.2** Students identify and solve addition and subtraction problems involving small whole numbers.
Section O — SIMPLE SUBTRACTION (no symbols)	Number	Addition and subtraction	**N1.2** Students identify and solve addition and subtraction problems involving small whole numbers.
Section P — MENTAL SUBTRACTION	Number	Addition and subtraction	**N1.2** Students identify and solve addition and subtraction problems involving small whole numbers.

NAK Strand: MEASUREMENT

NAK Section	Qld Strand	Topic	Working towards Working towards Learning Outcomes Level 1
Section A — IDENTIFYING ATTRIBUTES	Measurement	Length, mass, area and volume	**M1.1** Students select the appropriate attribute to compare and order size of objects and measure with non-standard units.
Section B — ESTIMATE, MEASURE & COMPARE (length, mass, capacity)	Measurement	Length, mass, area and volume	**M1.1** Students select the appropriate attribute to compare and order size of objects and measure with non-standard units.
Section C — INFORMAL MEASUREMENT	Measurement	Length, mass, area and volume	**M1.1** Students select the appropriate attribute to compare and order size of objects and measure with non-standard units.
Section D — CONCEPT OF TIME/CLOCKS	Measurement	Time	**M1.2** Students sequence familiar events related to days and weeks, and directly compare the duration of events.

NAK Strand: SPACE

NAK Section	Qld Strand	Topic	Working towards Working towards Learning Outcomes Level 1
Section A — RECOGNISE SHAPES & OBJECTS (2D)	Space	Shape and line	**S1.1** Students identify everyday shapes and objects using geometric names and make and describe simple representations of them.
Section B — DRAWING 2D SHAPES	Space	Shape and line	**S1.1** Students identify everyday shapes and objects using geometric names and make and describe simple representations of them.
Section C — RECOGNISE SHAPES & OBJECTS (3D)	Space	Shape and line	**S1.1** Students identify everyday shapes and objects using geometric names and make and describe simple representations of them.
Section D — PATTERN & MOVEMENT	Space	Shape and line	**S1.1** Students identify everyday shapes and objects using geometric names and make and describe simple representations of them.
Section E — USING SIMPLE LOCATION/ POSITION LANGUAGE	Space	Location, direction and movement	**S1.2** Students follow and give simple directions to move through, and locate and place objects in, familiar environments.
Section F — LOCATION (following a pathway)	Space	Location, direction and movement	**S1.2** Students follow and give simple directions to move through, and locate and place objects in, familiar environments.
Section G — BUILDING A MODEL	Space	Shape and line	**S1.1** Students identify everyday shapes and objects using geometric names and make and describe simple representations of them.

NAK Strand: CHANCE & DATA

NAK Section	Qld Strand	Topic	Working towards Working towards Learning Outcomes Level 1
Section A — CHANCE	Chance and data	Chance	**CD1.1** Students use everyday language when commenting on aspects of chance in practical activities and familiar events.
Section B — POSE QUESTIONS & COLLECT INFORMATION; REPRESENT DATA (make pictographs)	Chance and data	Data	**CD1.2** Students collect data to investigate particular situations and interpret simple displays.

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Second Year of School correlation to Queensland Mathematics Syllabus Outcomes — Level 2

NAK Strand: NUMBER & PATTERNS

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 2
Section A — COUNTING COLLECTIONS OF OBJECTS (1–1 correspondence)	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section B — NUMBERS AT A GLANCE	Number/	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section C — ORDINAL NUMBER	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section D — WHOLE NUMBERS (read, order & compare)	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section E — PLACE VALUE	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section F — NUMBER PATTERNS	Patterns and algebra	Patterns and functions	**PA2.1** Students create and explain patterns. Identify and describe relationships using rules and use backtracking to reverse the effects of rules involving addition and subtraction.
Section G — WHOLE NUMBERS (computation/operations: addition, subtraction, informal multiplication))	Number/ Patterns and algebra	Addition and Subtraction/ Multiplication and division/ Equivalence and equations	**N2.2** Students identify and solve addition and subtraction problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts. **N2.3** Students identify and solve multiplication and division problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts. **PA2.2** Students represent and describe equivalence in equations that involve addition and subtraction.
Section H — MENTAL STRATEGIES (whole numbers up to 10)	Number	Addition and Subtraction	**N2.2** Students identify and solve addition and subtraction problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts.
Section I — FRACTIONS	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section J — PROBLEM SOLVING (addition)	Number	Number concepts/Addition and subtraction	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections. **N2.2** Students identify and solve addition and subtraction problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts.

NAK Strand: MEASUREMENT

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 2
Section A — COMMON MEASUREMENT LANGUAGE	Measurement	Length, mass, area and volume	**M2.1** Students use non-standard and standard units to estimate, measure and order the size of objects.
Section B — ESTIMATE, MEASURE & COMPARE (length, mass, capacity)	Measurement	Length, mass, area and volume	**M2.1** Students use non-standard and standard units to estimate, measure and order the size of objects.
Section C — INFORMAL MEASUREMENT	Measurement	Length, mass, area and volume	**M2.1** Students use non-standard and standard units to estimate, measure and order the size of objects.
Section D — CONCEPT OF TIME/CLOCKS	Measurement	Time	**M2.2** Students use a calendar to locate and sequence events, read and interpret key times on 12-hour displays and measure and compare durations of time.

NAK Strand: SPACE

NAK Section	Strand	Topic	Working towards Learning Outcomes Level 2
Section A — IDENTIFY, DESCRIBE, COMPARE & DRAW 2D SHAPES	Space	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations.
Section B — IDENTIFY, DESCRIBE & COMPARE 3D SHAPES	Space	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations.
Section C — LINES	Space	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations.
Section D — PATTERN & MOVEMENT	Space/ Patterns and algebra	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations. **PA2.1** Students create and explain patterns. Identify and describe relationships using rules and use backtracking to reverse the effects of rules involving addition and subtraction
Section E — USING LOCATION/POSITION LANGUAGE	Space	Location, direction and movement	**S2.2** Students interpret and create simple maps, plans and grids to follow and give directions, and to locate or arrange places or objects.
Section F — LOCATION (find, follow & describe a pathway)	Space	Location, direction and movement	**S2.2** Students interpret and create simple maps, plans and grids to follow and give directions, and to locate or arrange places or objects.

NAK Strand: CHANCE & DATA

NAK Section	QId Strand	Topic	Working towards Learning Outcomes Level 2
Section A — RECOGNISE & DESCRIBE CHANCE EVENTS	Chance and data	Chance	**CD2.1** Students identify and classify familiar events according to the likelihood of occurrence.
Section B — POSE QUESTIONS & COLLECT INFORMATION; REPRESENT DATA (make pictographs)	Chance and data	Data	**CD2.2** Students collect and organize data, create and interpret a variety of displays to investigate their own and others' questions, and identify elements of their display.

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Third Year of School correlation to Queensland Mathematics Syllabus Outcomes — Level 2

NAK Strand: NUMBER & PATTERNS

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 2
Section A — WHOLE NUMBERS (read, order & compare)	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section B — WHOLE NUMBERS (place value)	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section C — PATTERNS	Patterns and algerbra	Patterns and functions	**PA2.1** Students create and explain patterns. Identify and describe relationships using rules and use backtracking to reverse the effects of rules involving addition and subtraction.
Section D — WHOLE NUMBERS (computation/operations: addition, subtraction, multiplication, division)	Number	Addition and subtraction/ Multiplication and division/ Equivalence and equations	**N2.2** Students identify and solve addition and subtraction problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts. **N2.3** Students identify and solve multiplication and division problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts. **PA2.2** Students represent and describe equivalence in equations that involve addition and subtraction.
Section E — MENTAL STRATEGIES (with whole numbers up to 20 — addition)	Number	Addition and subtraction	**N2.2** Students identify and solve addition and subtraction problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts.
Section F — FRACTIONS	Number	Number concepts	**N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.
Section G — PROBLEM SOLVING: (addition, subtraction, multiplication, equal addition or multiplication, division, money problems)	Number	Addition and subtraction/ Multiplication and division/ Number concepts	**N2.2** Students identify and solve addition and subtraction problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts. **N2.3** Students identify and solve multiplication and division problems involving whole numbers, selecting from a range of computation methods, strategies and known number facts. **N2.1** Students compare and order whole numbers to 999, make and match different representations and combinations of whole numbers and of equivalent amounts of money and identify simple fractions of objects and collections.

NAK Strand: MEASUREMENT

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 2
Section A — COMMON MEASUREMENT LANGUAGE	Measurement	Length, mass, area and volume	**M2.1** Students use non-standard and standard units to estimate, measure and order the size of objects.
Section B — INFORMAL & FORMAL MEASUREMENT	Measurement	Length, mass, area and volume	**M2.1** Students use non-standard and standard units to estimate, measure and order the size of objects.
Section C — CONCEPT OF TIME/CLOCKS	Measurement	Time	**M2.2** Students use a calendar to locate and sequence events, read and interpret key times on 12-hour displays and measure and compare durations of time.

NAK Strand: SPACE

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 2
Section A — IDENTIFY, DESCRIBE, COMPARE & DRAW 2D SHAPES	Space	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations.
Section B — IDENTIFY, DESCRIBE & COMPARE 3D SHAPES	Space	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations.
Section C — LINES	Space	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations.
Section D — USING LOCATION/POSITION LANGUAGE	Space	Shape and line	**S2.1** Students describe and sort 3D shapes and objects and 2D shapes according to geometric properties and identify shapes and objects from different viewpoints or orientations.
Section E — LOCATION (find, follow & describe a pathway)	Space	Location, direction and movement	**S2.2** Students interpret and create simple maps, plans and grids to follow and give directions, and to locate or arrange places or objects.
Section F — READ SIMPLE MAPS	Space	Location, direction and movement	**S2.2** Students interpret and create simple maps, plans and grids to follow and give directions, and to locate or arrange places or objects.

NAK Strand: CHANCE & DATA

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 2
Section A — RECOGNISE & DESCRIBE CHANCE EVENTS	Chance and data	Chance	**CD2.1** Students identify and classify familiar events according to the likelihood of occurrence.
Section B — COMPARE & INTERPRET INFORMATION FROM GRAPHS	Chance and data	Data	**CD2.2** Students collect and organize data, create and interpret a variety of displays to investigate their own and others' questions, and identify elements of their display.
Section C — COLLECT, ORGANISE & INTERPRET INFORMATION; REPRESENT DATA (make graphs)	Chance and data	Data	**CD2.2** Students collect and organize data, create and interpret a variety of displays to investigate their own and others' questions, and identify elements of their display.

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Fourth Year of School correlation to Queensland Mathematics Syllabus Outcomes — Level 3

NAK Strand: NUMBER & PATTERNS

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — WHOLE NUMBERS (read, order & compare)	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section B — WHOLE NUMBERS (place value)	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section C — PATTERNS	Patterns and algebra	Patterns and functions/ Multiplication and division	**PA3.1** Students create and continue number patterns, identify, describe and represent relationships between two quantities and use backtracking to reverse any of the four operations. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section D — WHOLE NUMBERS (computation/operations: addition, subtraction, multiplication, division, mathematical laws)	Number/Patterns and algebra	Addition and subtraction/ Multiplication and division/ Equivalence and equations	**N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **PA3.2** Students represent and describe equivalence in equations that involve combinations of multiplication and division or addition and subtraction.
Section E — MENTAL STRATEGIES (multiplication 1 to 5, 10 & 11 facts)	Number	Multiplication and division	**N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section F — MENTAL STRATEGIES (operations with whole numbers)	Number	Addition and subtraction/ Multiplication and division	**N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section G — FRACTIONS	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section H — PROBLEM SOLVING	Number	Number concepts/ Addition and subtraction/Multiplication and division	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment. **N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.

NAK Strand: MEASUREMENT

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — ESTIMATE, MEASURE & COMPARE MEASUREMENTS: length, perimeter, area, volume, capacity, mass, converting measurements	Measurement	Length, mass, area and volume	**M3.1** Students identify and use equivalent forms of standard units when measuring, comparing and ordering, and estimate using a range of personal referents.
Section B — CONCEPT OF TIME/CLOCKS	Measurement	Time	**M3.2** Students read, record and calculate with 12-hour time, and interpret calendars and simple timetables related to daily activities.

NAK Strand: SPACE

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — IDENTIFY, DESCRIBE & COMPARE 2D SHAPES	Space	Shape and line	**S3.1** Students describe the defining geometric properties of families of 3D shapes, model 3D shapes using nets and other representations, and identify and describe the properties of specific families of 2D shapes.
Section B — IDENTIFY, DESCRIBE & COMPARE 3D SHAPES	Space	Shape and line	**S3.1** Students describe the defining geometric properties of families of 3D shapes, model 3D shapes using nets and other representations, and identify and describe the properties of specific families of 2D shapes.
Section C — LINES & ANGLES	Space	Shape and line	**S3.1** Students describe the defining geometric properties of families of 3D shapes, model 3D shapes using nets and other representations, and identify and describe the properties of specific families of 2D shapes.
Section D — USE LOCATION/POSITION LANGUAGE & READ SIMPLE MAPS	Space	Location, direction and movement	**S3.2** Students interpret and create maps and plans using a range of conventions, describe locations and give directions using major compass points, angles and grids.

NAK Strand: CHANCE & DATA

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — CHANCE	Chance and data	Chance	**CD3.1** Students identify all possible outcomes of familiar situations or actions and, for these samples spaces, order the likelihood of occurrence of the identified outcomes using experimental data.
Section B — COMPARE & INTERPRET INFORMATION FROM GRAPHS	Chance and data	Data	**CD3.2** Students design and trial a variety of data collection methods and use existing sources of data to investigate their own and others' questions, organize data and create suitable displays identifying and interpreting elements of the displays.
Section C — PRESENT, INTERPRET & SUMMARISE DATA; REPRESENT DATA (make graphs)	Chance and data	Data	**CD3.2** Students design and trial a variety of data collection methods and use existing sources of data to investigate their own and others' questions, organize data and create suitable displays identifying and interpreting elements of the displays.

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Fifth Year of School correlation to Queensland Mathematics Syllabus Outcomes — Level 3

NAK Strand: NUMBER & PATTERNS

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — WHOLE NUMBERS (read, order & compare)	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section B — WHOLE NUMBERS (place value)	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section C — PATTERNS	Patterns and algebra	Patterns and functions/ Multiplication and division	**PA3.1** Students create and continue number patterns, identify, describe and represent relationships between two quantities and use backtracking to reverse any of the four operations. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section D — WHOLE NUMBERS (computation/operations: addition, subtraction, multiplication, division, mathematical laws)	Number/Patterns and algebra	Addition and subtraction/ Multiplication and division/ Equivalence and equations	**N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **PA3.2** Students represent and describe equivalence in equations that involve combinations of multiplication and division or addition and subtraction.
Section E — MENTAL STRATEGIES (multiplication 1 to 12 facts/ division 1 to 5, 10 & 11 facts)	Number	Multiplication and division	**N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section F — MENTAL STRATEGIES (operations with whole numbers)	Number	Addition and subtraction/ Multiplication and division	**N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section G — DECIMAL NUMBERS (read, order & compare)	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section H — DECIMAL NUMBERS (place value)	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section I — DECIMAL NUMBERS (computation/operations: addition of decimals, subtraction of decimals)	Number	Number concepts/Addition and subtraction	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment. **N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section J — FRACTIONS (read, order & compare)	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section K — FRACTIONS (computation/operations & fractional parts: addition of fraction, subtraction of fractions)	Number	Number concepts/Addition and subtraction	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment. **N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.
Section L — REPRESENTING FRACTIONS & DECIMALS	Number	Number concepts	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment.
Section M — PROBLEM SOLVING	Number	Number concepts/ Addition and subtraction/Multiplication and division	**N3.1** Students compare, order and represent whole numbers to 9 999 and common and decimal fractions, calculate cash transactions and describe other methods of payment. **N3.2** Students identify and solve addition and subtraction problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts. **N3.3** Students identify and solve multiplication and division problems involving whole numbers, and decimal fractions in context, selecting from a range of computation methods, strategies and known number facts.

NAK Strand: MEASUREMENT

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — ESTIMATE, MEASURE & COMPARE MEASUREMENTS: length, perimeter, area, volume, capacity, mass, measuring units, converting measurements	Measurement	Length, mass, area and volume	**M3.1** Students identify and use equivalent forms of standard units when measuring, comparing and ordering, and estimate using a range of personal referents.
Section B — CONCEPT OF TIME/CLOCKS	Measurement	Time	**M3.2** Students read, record and calculate with 12-hour time, and interpret calendars and simple timetables related to daily activities.

NAK Strand: SPACE

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — IDENTIFY, DESCRIBE, DRAW & COMPARE 2D SHAPES; SYMMETRY	Space	Shape and line	**S3.1** Students describe the defining geometric properties of families of 3D shapes, model 3D shapes using nets and other representations, and identify and describe the properties of specific families of 2D shapes.
Section B — IDENTIFY, DESCRIBE & COMPARE 3D SHAPES	Space	Shape and line	**S3.1** Students describe the defining geometric properties of families of 3D shapes, model 3D shapes using nets and other representations, and identify and describe the properties of specific families of 2D shapes.
Section C — LINES & ANGLES	Space	Shape and line	**S3.1** Students describe the defining geometric properties of families of 3D shapes, model 3D shapes using nets and other representations, and identify and describe the properties of specific families of 2D shapes.
Section D — USE LOCATION/POSITION LANGUAGE & READ SIMPLE MAPS	Space	Location, direction and movement	**S3.2** Students interpret and create maps and plans using a range of conventions, describe locations and give directions using major compass points, angles and grids.

NAK Strand: CHANCE & DATA

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 3
Section A — CHANCE	Chance and data	Chance	**CD3.1** Students identify all possible outcomes of familiar situations or actions and, for these samples spaces, order the likelihood of occurrence of the identified outcomes using experimental data.
Section B — COMPARE & INTERPRET INFORMATION FROM GRAPHS	Chance and data	Data	**CD3.2** Students design and trial a variety of data collection methods and use existing sources of data to investigate their own and others' questions, organize data and create suitable displays identifying and interpreting elements of the displays.
Section C — PRESENT, INTERPRET & SUMMARISE DATA; REPRESENT DATA (make graphs)	Chance and data	Data	**CD3.2** Students design and trial a variety of data collection methods and use existing sources of data to investigate their own and others' questions, organize data and create suitable displays identifying and interpreting elements of the displays.

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Sixth Year of School correlation to Queensland Mathematics Syllabus Outcomes — Level 4

NAK Strand: NUMBER & PATTERNS

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 4
Section A — WHOLE NUMBERS (read, order & compare)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section B — WHOLE NUMBERS (place value)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section C — PATTERNS	Patterns and algebra	Patterns and functions/ Equivalence and equations	**PA4.1** Students identify and create representations of patterns and functions and apply backtracking to solve simple equations that involve combinations of the four operations. **PA4.2** Students create and interpret equations containing unknowns, explain the effect of order of operations, and justify solutions to equations.
Section D — WHOLE NUMBERS (computation/operations: addition, subtraction, multiplication, division, mathematical laws)	Number/ Patterns and algebra	Addition and subtraction/ Multiplication and division/ Patterns and functions/ Equivalence and equations	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts. **N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts. **PA4.1** Students identify and create representations of patterns and functions and apply backtracking to solve simple equations that involve combinations of the four operations. **PA4.2** Students create and interpret equations containing unknowns, explain the effect of order of operations, and justify solutions to equations.
Section E — MENTAL STRATEGIES (multiplication/division 1 to 12 facts)	Number	Multiplication and division	**N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts.
Section F — MENTAL STRATEGIES (operations with whole numbers)	Number	Addition and subtraction/ Multiplication and division	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts. **N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts.
Section G — DECIMAL NUMBERS (read, order & compare)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section H — DECIMAL NUMBERS (place value)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section I — DECIMAL NUMBERS (computation/operations: addition of decimals, subtraction of decimals)	Number	Addition and subtraction	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts.
Section J — FRACTIONS (read, order & compare)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section K — FRACTIONS (computation/operations & fractional parts: addition of fraction, subtraction of fractions)	Number	Addition and subtraction	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts.
Section L — REPRESENTING FRACTIONS & DECIMALS	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section M — PROBLEM SOLVING	Number/ Patterns and algebra	Number concepts/Addition and subtraction/Multiplication and division/ Patterns and functions/Equivalence and equations	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions. **N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts. **N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts. **PA4.1** Students identify and create representations of patterns and functions and apply backtracking to solve simple equations that involve combinations of the four operations. **PA4.2** Students create and interpret equations containing unknowns, explain the effect of order of operations, and justify solutions to equations.

NAK Strand: MEASUREMENT

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 4
Section A — ESTIMATE, MEASURE & COMPARE MEASUREMENTS: length, perimeter, area, volume, measuring units, converting measurements	Measurement	Length, mass, area and volume	**M4.1** Students choose appropriate units when estimating and measuring and explain relationships between dimensions when investigating areas, volumes and lengths of boundaries of rectangles and prisms.
Section B — CONCEPT OF TIME/CLOCKS	Measurement	Time	**M4.2** Students read, record and calculate with 24-hour time and develop timetables and calendars to plan and organize events and activities.

NAK Strand: SPACE

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 4
Section A — IDENTIFY, DESCRIBE & COMPARE 2D & 3D SHAPES	Space	Shape and line	**S4.1** Students analyse the geometric properties of a range of 2D and 3D shapes to classify shapes into subgroups of families and justify reasoning.
Section B — LINES	Space	Shape and line	**S4.1** Students analyse the geometric properties of a range of 2D and 3D shapes to classify shapes into subgroups of families and justify reasoning.
Section C — ANGLES	Space	Shape and line	**S4.1** Students analyse the geometric properties of a range of 2D and 3D shapes to classify shapes into subgroups of families and justify reasoning.
Section D — SYMMETRY	Space	Shape and line	**S4.1** Students analyse the geometric properties of a range of 2D and 3D shapes to classify shapes into subgroups of families and justify reasoning.
Section E — USE LOCATION/POSITION LANGUAGE & READ SIMPLE MAPS	Space	Location, direction and movement	S4.2 Students interpret maps and plans with reference to conventions, describe the effects of change in latitude and longitude and describe movements using compass points and distance.

NAK Strand: CHANCE & DATA

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 4
Section A — CHANCE	Chance and data	Chance	**CD4.1** Students analyse experimental data and compare numerical results with predicted results to inform judgments about the likelihood of particular outcomes.
Section B — COMPARE & INTERPRET INFORMATION FROM GRAPHS	Chance and data	Data	**CD4.2** Students plan and carry out data collections using their own data record templates, choose or construct appropriate displays and make comparisons about the data based on the displays and measures of locations.
Section C — PRESENT, INTERPRET & SUMMARISE DATA; REPRESENT DATA (make graphs)	Chance and data	Data	**CD4.2** Students plan and carry out data collections using their own data record templates, choose or construct appropriate displays and make comparisons about the data based on the displays and measures of locations.

Nelson Numeracy Assessment Kit

Seventh Year of School correlation to Queensland Mathematics Syllabus Outcomes — Level 4

NAK Strand: NUMBER & PATTERNS

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 4
Section A — WHOLE NUMBERS (read, order & compare)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section B — WHOLE NUMBERS (place value)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section C — PATTERNS	Patterns and algebra	Patterns and functions/ Equivalence and equations	**PA4.1** Students identify and create representations of patterns and functions and apply backtracking to solve simple equations that involve combinations of the four operations. **PA4.2** Students create and interpret equations containing unknowns, explain the effect of order of operations, and justify solutions to equations.
Section D — WHOLE NUMBERS (computation/operations: addition, subtraction, multiplication, division, mathematical laws)	Number/ Patterns and algebra	Addition and subtraction/ Multiplication and division/ Patterns and functions/ Equivalence and equations	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts. **N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts. **PA4.1** Students identify and create representations of patterns and functions and apply backtracking to solve simple equations that involve combinations of the four operations. **PA4.2** Students create and interpret equations containing unknowns, explain the effect of order of operations, and justify solutions to equations.
Section E — MENTAL STRATEGIES (multiplication/division 1 to 12 facts)	Number	Multiplication and division	**N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts.
Section F — MENTAL STRATEGIES (operations with whole numbers)	Number	Addition and subtraction/ Multiplication and division	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts. **N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts.
Section G — DECIMAL NUMBERS (read, order & compare)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section H — DECIMAL NUMBERS (place value)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section I — DECIMAL NUMBERS (computation/operations: addition of decimals, subtraction of decimals, multiplication of decimals)	Number	Addition and subtraction/ Multiplication and division	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts. **N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts.
Section J — FRACTIONS (read, order & compare)	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section K — FRACTIONS (computation/operations & fractional parts: addition of fraction, subtraction of fractions)	Number	Addition and subtraction	**N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts.
Section L — REPRESENTING FRACTIONS, DECIMALS & PERCENTAGES	Number	Number concepts	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions.
Section M — PROBLEM SOLVING	Number/ Patterns and algebra	Number concepts/Addition and subtraction/Multiplication and division/ Patterns and functions/Equivalence and equations	**N4.1** Students compare and order whole numbers and common and decimal fractions of any size, make connections between key percentages and fractions and describe how a range of factors influence financial decisions. **N4.2** Students identify and solve addition and subtraction problems involving any whole numbers and decimal fractions, selecting from a range of computation methods, strategies and known number facts. **N4.3** Students identify and solve multiplication and division problems involving whole numbers, decimal fractions, common fractions, percentages and rates, selecting from a range of computation methods, strategies and known number facts. **PA4.1** Students identify and create representations of patterns and functions and apply backtracking to solve simple equations that involve combinations of the four operations. **PA4.2** Students create and interpret equations containing unknowns, explain the effect of order of operations, and justify solutions to equations.

NAK Strand: MEASUREMENT

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Section B — CONCEPT OF TIME/CLOCKS	Measurement	Time	**M4.2** Students read, record and calculate with 24-hour time and develop timetables and calendars to plan and organize events and activities.

NAK Strand: SPACE

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 4
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Section B — LINES	Space	Shape and line	**S4.1** Students analyse the geometric properties of a range of 2D and 3D shapes to classify shapes into subgroups of families and justify reasoning.
Section C — ANGLES	Space	Shape and line	**S4.1** Students analyse the geometric properties of a range of 2D and 3D shapes to classify shapes into subgroups of families and justify reasoning.
Section D — SYMMETRY	Space	Shape and line	**S4.1** Students analyse the geometric properties of a range of 2D and 3D shapes to classify shapes into subgroups of families and justify reasoning.
Section E — USE LOCATION/POSITION LANGUAGE & READ SIMPLE MAPS	Space	Location, direction and movement	S4.2 Students interpret maps and plans with reference to conventions, describe the effects of change in latitude and longitude and describe movements using compass points and distance.

NAK Strand: CHANCE & DATA

NAK Section	Qld Strand	Topic	Working towards Learning Outcomes Level 4
Section A — CHANCE	Chance and data	Chance	**CD4.1** Students analyse experimental data and compare numerical results with predicted results to inform judgments about the likelihood of particular outcomes.
Section B — COMPARE & INTERPRET INFORMATION FROM GRAPHS	Chance and data	Data	**CD4.2** Students plan and carry out data collections using their own data record templates, choose or construct appropriate displays and make comparisons about the data based on the displays and measures of locations.
Section C — PRESENT, INTERPRET & SUMMARISE DATA; REPRESENT DATA (make graphs)	Chance and data	Data	**CD4.2** Students plan and carry out data collections using their own data record templates, choose or construct appropriate displays and make comparisons about the data based on the displays and measures of locations.