

Mathletics



Year 4

Mathematics
The New Zealand Curriculum **2025**

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Teacher Guide

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The New Zealand Curriculum 2025

Year 4

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The Mathematics Programme – Year 4 Teacher Guide
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Introduction to the Programme

The Mathematics Programme is designed to support teaching and learning aligned with The New Zealand Curriculum – Mathematics and Statistics (2025)

The **Mathletics Programme Years 0–8** provides a comprehensive set of resources designed to support teachers in delivering high-quality mathematics teaching aligned with **The New Zealand Curriculum – Mathematics and Statistics**. The programme combines practical classroom materials with digital learning tools to support conceptual understanding, procedural fluency and problem solving.

The programme is built around a clear progression of mathematical ideas across the year. Concepts are introduced through explicit teaching, explored through discussion and hands-on activities, and reinforced through structured practice. Students then apply their learning through written tasks and digital activities that strengthen understanding and build confidence.

Each year level includes a **Teacher Guide, Student Book, Daily Lesson Plans** and **Mathletics online lessons**. Together, these resources support teachers in planning, teaching and assessing mathematics in a consistent and manageable way across the school year.

The programme supports the six strands of **The New Zealand Curriculum – Mathematics and Statistics**:

Number: numbers, quantities and calculations.

Algebra: patterns and relationships represented using symbols and diagrams.

Measurement: measuring and comparing length, mass, capacity and time.

Geometry: shapes, spatial relationships and transformations.

Statistics: collecting, representing and interpreting data.

Probability: chance and likelihood and how to describe uncertainty.

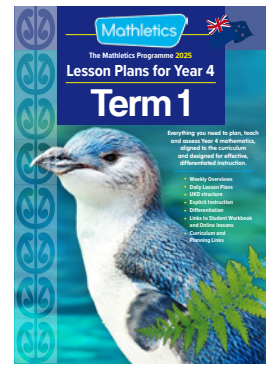
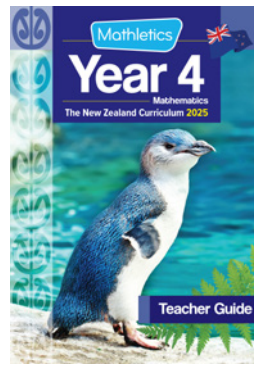
Learning is organised into weekly sequences that develop mathematical ideas step by step. Assessment opportunities are embedded throughout the programme so teachers can monitor understanding and respond to student needs.

By combining structured teaching guidance, rich classroom activities and digital reinforcement, the programme helps teachers create engaging mathematics lessons while building strong mathematical understanding for every student.



How the Programme Works

The Mathletics Programme provides teachers with **clear weekly guidance and flexible daily teaching support**. The programme integrates four key components: the **Teacher Guide**, **Daily Lesson Plans**, **Student Book** and **Mathletics online lessons**.



Teacher Guide

The **Teacher Guide** provides a **week-by-week overview** of the mathematics learning across the year. Each week is presented as a double-page spread that summarises:

- the key mathematical ideas for the week
- learning intentions and success criteria
- the main classroom activities
- links to Student Book pages and Mathletics lessons
- suggested assessment opportunities

These weekly overviews provide teachers with a clear picture of the learning progression and support planning and reflection throughout the term.

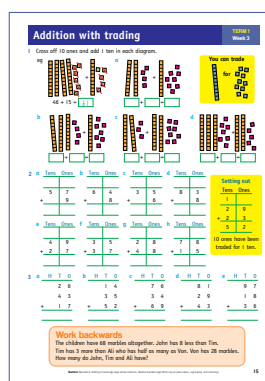
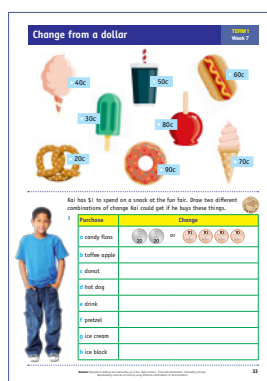
Daily Lesson Plans (Downloadable)

Detailed **Daily Lesson Plans** are provided as a downloadable resource. These plans expand the weekly overview

into a full sequence of daily lessons, including:

- explicit teaching explanations and worked examples
- language focus and discussion prompts
- step-by-step **I Do, We Do, You Do** teaching sequences
- hands-on activities and problem-solving tasks
- differentiation suggestions
- **Check for Understanding** questions

Providing these lesson plans digitally allows teachers to easily access and print the detailed guidance when needed while keeping the printed Teacher Guide concise and easy to use.



Student Book

The **Student Book** provides structured written practice that consolidates classroom learning. Tasks help students apply new ideas, practise key skills and represent mathematical thinking using diagrams, models and written explanations.

Mathletics Online

The **Mathletics online component** provides activities that reinforce concepts taught in class. These activities allow students to practise skills independently, receive immediate feedback and strengthen fluency with key mathematical ideas.

Assessment and Reflection

Assessment opportunities are embedded throughout the programme. Weekly quick quizzes and exit tasks allow teachers to check understanding, while reflection prompts in the Teacher Guide support ongoing **Teaching as Inquiry** and planning for next steps.

Together, these components create a connected learning system that supports **explicit teaching, meaningful practice and ongoing assessment**, helping teachers build strong mathematical understanding across the year.



Using the Mathletics Programme

Using the Mathletics Programme Teacher Guide, Lesson Plans and online learning package

The **Mathletics Programme: 0–8** provides practical, classroom-ready materials that enable schools to strengthen conceptual teaching and learning progressions across the Mathematics and Statistics learning area. Teachers retain full agency over planning, sequencing and delivery, using the programme to enrich, reinforce or extend learning within their existing mathematics programmes.

The Teacher Guide

The **Year 4 Teacher Guide** provides teachers with a clear, week-by-week overview of the mathematics concepts, skills and learning intentions taught across the term. Each week includes a summary of learning content, key activities, curriculum links and assessment focus areas. Together with the **Daily Lesson Plans**, it forms a complete, structured program that supports high-quality, consistent classroom instruction.

This guide ensures that every student experiences a balance of **conceptual understanding, procedural fluency and problem solving**, aligned to fully support the *New Zealand Curriculum – Mathematics and Statistics (2025)*.

Each week is presented as a **double-page spread** for easy reference and flexible use in planning, teaching and reflection.



The Mathletics Programme Lesson Plans				YEAR 4 WEEK 1
Term 1 Week 1 Overview Number: Number structures: Numbers to 10,000				
Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Dollar amounts	Whole numbers can be read, written, compared and ordered using base-10 place value to 10,000.	<ul style="list-style-type: none"> Read and write dollar amounts to 10,000 Compare and order amounts of money Add and subtract simple amounts mentally Identify amounts closest to a given value 	<ul style="list-style-type: none"> Compare and order amounts using place value Order money from least to greatest Add \$10 and subtract \$100 mentally Identify amounts closest to \$100 and \$1,000 	<ul style="list-style-type: none"> Page 2: Compare and order dollar amounts; add \$10; subtract \$100; identify closest values.
2 Thousands	Numbers increase and decrease in thousands following base-10 place value patterns.	<ul style="list-style-type: none"> Find 1,000 more or less Identify halfway points between thousands Add 1,000 and 100 using place value Read and write numbers in words and numerals 	<ul style="list-style-type: none"> Use number line to explore thousands Add and subtract 1,000 mentally Find halfway between thousands Write numbers in words and numerals 	<ul style="list-style-type: none"> Page 3: 1,000 more/less; halfway between; add 1, 10, 100, write numbers in words and numerals.
3 Numbers to 10,000	Whole numbers to 10,000 can be represented using base-10 structure.	<ul style="list-style-type: none"> Read numbers using thousands, hundreds, tens and ones Write numbers in words and numerals Compare and identify larger numbers Match numerals to place-value names 	<ul style="list-style-type: none"> Build numbers with base-10 blocks Read and write numbers to 10,000 Compare numbers Match numerals to written names 	<ul style="list-style-type: none"> Page 4: Write numbers shown; write in words; compare numbers; match numerals to names.
4 Place value	Each digit has a value based on its position in the base-10 system.	<ul style="list-style-type: none"> Expand numbers into thousands, hundreds, tens and ones Identify value of a digit Order four-digit numbers Add 10, 100 and 1,000 using place value 	<ul style="list-style-type: none"> Expand numbers using place-value charts Identify digit values Order numbers Apply place-value reasoning to add 10, 100 and 1,000 	<ul style="list-style-type: none"> Page 5: Expand numbers; find value of digits; order numbers; place-value calculations.
5 Problem solving – Count by 25s and 50s	Counting in 25s and 50s creates predictable patterns that help solve money problems efficiently.	<ul style="list-style-type: none"> Count forward in 25s and 50s Use skip-counting to solve money problems Recognise repeated-addition patterns Explain a faster strategy 	<ul style="list-style-type: none"> Skip-count in 25s and 50s Solve money problems Use patterns to calculate totals Discuss faster strategies using multiplication 	<ul style="list-style-type: none"> Page 6: Solve problems using counting in 25s and 50s; explain strategy.

Assessment Focus and Teacher Reflection – Term 1, Week 1		YEAR 4 END OF WEEK 1
Unit: Number structures: Numbers to 10,000		
Focus: Reading, writing, comparing and ordering whole numbers to 10,000, understanding place value, using rounding, and applying number patterns to money and problem solving.		
Key Understandings to Assess		
Area	Expected Understanding	Evidence to Look For
Place Value to 10,000	Students understand that each digit has a value based on its position (thousands, hundreds, tens, ones).	Correctly expands numbers (e.g. 3,648 = 3,000 + 600 + 40 + 8); identifies value of digits; explains place-value reasoning.
Reading and Writing Numbers	Students can read, write and represent numbers to 10,000 using base-10 numerals.	Writes numbers in words and numerals accurately; matches numerals to place-value names; represents numbers using base-10 models.
Comparing and Ordering Numbers	Students compare and order whole numbers using place-value understandings.	Correctly orders numbers; explains which digit determines the larger number; uses <, >, = appropriately.
Number Patterns and Place Value Changes	Students recognise patterns when adding or subtracting 1, 10, 100 and 1,000.	Correctly identifies which digit changes; applies patterns to find 1,000 more/less; explains reasoning using place-value language.
Money and Real-World Knowledge Use	Students apply place value and number skills to money and real-life contexts.	Compares money amounts; adds or subtracts simple values accurately; identifies closest value (e.g. to \$100 or \$1,000).
Problem Solving with Number Patterns	Students use skip-counting (25s, 50s, 100s) and place-value strategies to solve problems.	Uses efficient counting strategies; explains pattern-based reasoning; solves money and number problems accurately.
Assessment Opportunities		
Type	Suggested Activity	What to Observe
Observation (Formative)	Which numerals represent and expand four-digit numbers using place-value charts or base-10 materials.	Are students correctly identifying thousands, hundreds, tens and ones? Can they explain digit value clearly?
Oral Check	Ask: Which is larger, 3,482 or 3,842? How do you know? Can you find a number more than 5,219?	Listen for correct use of place-value vocabulary: thousands, hundreds, digit, value, greater, less.
Written Work	Review Student Book pp. 2–4.	Check correct number reading/writing, correct place value vocabulary, rounding and problem-solving accuracy.
Practical Task	Money comparison task: Provide different dollar amounts and ask students to order them and find closest to \$1,000.	Can students compare using place value? Do they use rounding or estimation appropriately?
Exit Ticket/Quick Quiz	Provide 5 short mixed questions covering place value, ordering, rounding and number patterns.	Identify students needing reinforcement in place value, rounding or pattern reasoning.
Quick Quiz / Exit Ticket (5 Questions)	<ol style="list-style-type: none"> Write this number in expanded form: 4,372. Which number is larger: 5,409 or 5,490? Explain. What is 1,000 more than 6,285? Round 3,648 to the nearest hundred. Count by 50s: 200, 250, _____ 	Teaching as Inquiry: Reflection Notes Reflection Prompts Students confidently reading, writing and expanding numbers to 10,000. Students confidently comparing, ordering and rounding numbers. Students successfully applying place value to money and real-life contexts. Students needing support (e.g. place value, digit value, rounding, number patterns). Misconceptions noticed (e.g. digit size confusion, incorrect rounding, ordering by last digit). Notes/Next Steps

Left page Week Overview:

Summarises the week's focus, learning intentions, success criteria, main activities and Student Book links.

- Provides quick visibility of the mathematical progression.
- Highlights connections to *Mathletics* and activities and New Courses.
- Supports lesson preparation and group differentiation.

Right page Assessment and Teacher Reflection:

Identifies what to assess and how to gather evidence of learning throughout the week.

- Includes suggested formative assessment methods (observation, oral check, written work, quick quiz).
- Offers 5-question exit tickets to check understanding.
- Provides reflection prompts to guide Teaching as Inquiry and next steps.

How a Lesson Works

Each **Daily Lesson Plan** provides a clear structure that guides teachers through the introduction, exploration and practice of a mathematical idea. Lessons are designed to build conceptual understanding, develop mathematical language and provide opportunities for students to practise and apply new learning.

YEAR 4 WEEK 1 Day 1

Number: Number structures

DAILY LESSON PLAN Week 1 • Lesson 1
Topic: Dollar amounts

In this lesson, students explore whole numbers beyond 1,000 through money contexts. They read, write, compare and order dollar amounts, connect numbers to base-10 place value, and apply rounding to the nearest ten, hundred and thousand to estimate and reason about amounts.

Learning Intention
 Students will understand that whole numbers greater than 1,000 follow a base-10 structure and can be read, written, compared, ordered and rounded when working with dollar amounts.

Success Criteria

- ✓ I can read and write dollar amounts greater than 1,000.
- ✓ I can compare and order money amounts using place value.
- ✓ I can represent numbers using thousands, hundreds, tens and ones.
- ✓ I can round dollar amounts to the nearest 10, 100 or 1,000.

Language Focus
Key terms: thousands, hundreds, tens, ones, digit, place value, compare, order, greater than, less than, equal, round, nearest, estimate, value
Sentence stems:

- The number ___ has ___ thousands, ___ hundreds, ___ tens and ___ ones.
- ___ is greater than ___ because the ___ digit is larger.
- When I round ___ to the nearest hundred, I get ___.
- I know this amount is closest to ___ because ___.

Launch Activity (5 minutes)
 Display several wallet amounts from the page (e.g. \$946, \$1,035, \$2,413, \$1,197).
Ask: "Which wallet holds the most money? Which holds the least?"
Then: "How do you know?"
Assessment for Learning
 Listen for place-value reasoning (students referring to thousands first, not just reading digits).

Explicit Instruction (10–12 minutes)

1. Understanding Place Value in Dollar Amounts
I Do • Model \$1,261 using a place-value chart: 1 thousand, 2 hundreds, 6 tens, 1 one.
 Explain that each place is 10 times the value of the place to its right.
We Do • Build several amounts together (e.g. \$1,035, \$608, \$2,413).
Ask: Which digit shows the thousands? What happens when the thousands digit changes?
You Do • Students represent given amounts using place-value charts or expanded form.
 Check for understanding: Why is \$1,197 greater than \$946?

2. Comparing and Ordering Dollar Amounts
I Do • Compare \$1,261 and \$197. Start with thousands, then hundreds, then tens.
We Do • Order a set of wallet amounts from least to greatest together. Discuss reasoning aloud.
You Do • Students order the wallet values from the page independently.

3. Rounding Dollar Amounts
I Do • Model rounding \$1,261 to the nearest 10 (\$1,260), the nearest 100 (\$1,300) and the nearest 1,000 (\$1,000).
Ask: How does rounding help estimate and compare quickly?
We Do • Round several values together (e.g. \$946, \$1,197, \$2,413).
You Do • Students round selected wallet values to nearest 10, 100 and 1,000.

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Learning Intention and Success Criteria

Each lesson begins with a clear **learning intention** that identifies the key mathematical idea for the lesson. **Success criteria** describe what students should be able to do by the end of the lesson and provide a shared focus for learning.

Language Focus

Key mathematical vocabulary and sentence stems support students in explaining their thinking. These prompts encourage students to use precise mathematical language when discussing patterns, strategies and solutions.

Launch Activity

A short warm-up activity activates prior knowledge and introduces the mathematical idea. This stage often includes quick questions or number tasks that help students notice patterns and prepare for the new concept.

Explicit Instruction

Teachers model the mathematical concept using examples, visual representations and worked solutions. Lessons follow a gradual release approach:

I Do – the teacher demonstrates the concept

We Do – the class works through examples together

You Do – students apply the idea independently

This structure helps students move from guided learning to independent understanding.

Guided and Independent Practice

Students practise and apply new learning through structured tasks and problem-solving activities. **Hands-on activities** encourage students to explore patterns, test ideas and explain their reasoning.

Student Book Practice

Students consolidate their understanding through written tasks in the **Student Book**, applying the concepts explored during the lesson.

Mathletics Online Practice

Interactive **Mathletics activities** reinforce key skills and provide additional independent practice. These activities provide immediate feedback and help strengthen fluency with important mathematical ideas.

Reflect and Check

Short questions and discussion prompts help teachers check student understanding. Students are encouraged to explain their thinking and reflect on the strategies they used.

Teaching as Inquiry

Each lesson includes prompts to help teachers observe student understanding and identify next steps for teaching. This supports ongoing planning and targeted support for students who need additional practice or extension.

YEAR 4 WEEK 1 Day 1

Number: Number structures

Differentiation Tips

Support

- Use numbers under 2,000.
- Provide place-value charts and base-10 blocks.
- Compare only two numbers at a time.

Extension

- Ask students to create their own wallet values and order them.
- Round numbers to estimate total money from multiple wallets.
- Introduce differences between two large amounts.

Teaching as Inquiry
 Observe whether students compare by place value or by reading digits incorrectly.

Hands-On Activity 1 (10 minutes)

Wallet Order Challenge
 Students receive cards with different dollar amounts. They arrange themselves from least to greatest and explain reasoning using place value.

Hands-On Activity 2 (10–15 minutes)

Rounding for Estimation
 Students estimate the total of two wallet amounts by rounding first, then check using exact values. Discuss when rounding is useful in real life (shopping, budgeting).

Student Book Practice
 Students complete p.2 of their workbook: **Dollar amounts**.
 Focus: Identify greatest and smallest wallet values, order wallet amounts, add \$10 and subtract \$100. Word problems

Mathletics Online Practice
New Course Unit: Number structure: Whole number
Activity: Are You Ready?
 Tests prior knowledge and provides data on potential areas of weakness to address.

Reflect and Check (5 minutes)

Quick-fire questions:

- Which place do you check first when comparing numbers?
- What happens when you round to the nearest 100?
- Is \$1,035 closer to \$1,000 or \$2,000? Why?
- Which is greater: \$1,261 or \$1,197? Explain.

Reflect and Share
 How does place value help you understand money amounts quickly?

Feedback
 Encourage students to use reasoning words such as thousands, digit, value and nearest.

Next Steps for Teacher (Teaching as Inquiry)

- Identify students confusing digit size with place value.
- Provide additional rounding practice for students unsure about midpoint decisions.
- Extend confident students with multi-step money problems and estimation.

Curriculum & Planning Links

NZ Curriculum (2025) – Number
Number structures, Operations & Financial Mathematics

Knowledge

- Whole numbers can be represented in the base 10 number system, where each digit has a place value 10 times that of the digit on the right.
- Each digit's value depends both on its position and the numeral in the position. Zero is used as a placeholder.
- Addition and subtraction can be carried out mentally, using known facts, place value and partitioning, or column methods.
- New Zealand currency is a decimal system of dollars made up of 100 cents.

Practices

- Reading, writing, comparing and ordering whole numbers up to 10,000 and representing them using base 10 structure
- Rounding whole numbers to the nearest thousand, hundred or ten
- Adding and subtracting up to four-digit numbers

New Zealand Mathematics Lesson Plans: Year 4 • Term 1 3P Learning © 2020

Prior Learning: Year 3 Overview

This summary highlights the key mathematical knowledge and practices covered during Year 3. These understandings provide the foundation for learning in Year 4.



Number – Number structures

Read, write, compare and order numbers to 1,000. Represent numbers to 1,000 using base 10 structure. Recognise the place value of digits in three-digit numbers and use groups of ones, tens and hundreds to structure numbers. Use grouping and rounding to the nearest 10 or 100 to estimate quantities. Identify odd and even numbers and skip count in sequences such as 2s, 3s, 4s, 5s, 8s, 10s and 100s.



Number – Operations

Add and subtract numbers to 1,000 using mental strategies, known facts, place value, and written strategies, including column methods. Solve one-step and simple multi-step problems involving addition and subtraction. Multiply and divide using grouping, arrays, repeated addition or subtraction, and known facts. Recall multiplication and related division facts for 2s, 3s, 4s, 5s, 8s and 10s. Multiply a two-digit number by a one-digit number. Divide whole numbers by a one-digit divisor with no remainders.



Number – Rational numbers

Recognise fractions as equal parts of a whole and represent fractions of sets, of regions, in measurements, and on number lines. Work with unit fractions and fractions with denominators up to 12. Compare fractions with the same denominator, identify simple equivalent fractions and add or subtract fractions with the same denominator within a whole. Find a fraction of a quantity and, given a fraction, calculate the whole.



Number – Financial mathematics

Represent amounts of money using common coins and notes. Combine amounts and calculate totals or change using addition and subtraction.



Algebra – Equations and relationships

Compare numbers in equations using greater than ($>$), less than ($<$) and equals ($=$). Check the truth of number sentences and complete open number sentences involving the four operations. Recognise, continue and create repeating and growing number patterns using shapes and numbers, and refer to individual terms using ordinal numbers.



Measurement – Measuring

Estimate, measure, order and compare length, mass and capacity using metric units. Measure, estimate and compare the perimeter and area of rectilinear shapes on grids in square units. Measure and calculate the perimeter of simple polygons with up to 5 sides in metric units. Describe turns using full, half and quarter rotations, in clockwise and anti-clockwise directions. Read time to the minute on analogue and digital clocks. Read time in words and on a calendar. Describe durations using common units of time.



Geometry – Shapes and Spatial Reasoning

Identify and describe regular polygons and common three-dimensional shapes from different viewpoints. Recognise lines of symmetry and create symmetrical patterns. Flip, slide and turn shapes to create patterns.



Geometry – Pathways

Follow and create step-by-step directions to move or place objects or people, including half and quarter turns. Use simple maps and directional language to describe locations.



Statistics – Developing knowledge from data, Visualisation and Interpretation of data

Collect categorical and numerical data by asking investigative questions. Represent data using tallies, tables, dot plots and bar graphs. Interpret data displays by describing patterns and answering questions about the data.

Year 4 Knowledge and Practices

The New Zealand Curriculum Mathematics and Statistics 2025

Knowledge		Practices		Student Pages			
Number — Number structures				Term 1	Term 2	Term 3	Term 4
Whole numbers can be represented in the base 10 number system, where each digit has a place value 10 times that of the digit on the right. Each digit's value depends both on its position (e.g. the tens position) and the numeral in the position. Zero is used as a placeholder.	Reading, writing, comparing, and ordering whole numbers up to 10,000 and representing them using base 10 structure			2, 3, 4, 6, 7, 9, 10, 11			
		Rounding whole numbers to the nearest thousand, hundred, or ten		2, 6, 7, 8			
Rounding can support predicting or estimating the result of a calculation. Rounding is based on identifying the nearest place value or unit (ten, hundred, thousand) for a given number; a number line supports this.	Rounding tenths to the nearest whole number						
	Counting forwards and backwards in 2s, 3s, 4s, 5s, 6s, 7s, 8s, 9s, 25s and 50s from multiples of the counting unit		5, 25	65, 66, 67, 68, 69			
	Counting in 10s, 100s, and 1,000s from any whole number up to 10,000		3	69			
Number — Operations				Term 1	Term 2	Term 3	Term 4
Addition and subtraction can be carried out mentally, using known facts, place value and partitioning, or column methods. Standard written algorithms (e.g. column addition, column subtraction) rely on place value, regrouping, and renaming.	Adding and subtracting up to four-digit numbers		2, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 33, 34, 35, 36, 37, 39, 40, 41, 42		73		
	Memorising multiplication and corresponding division facts for 2s to 10s				60, 61, 64, 65, 66, 67, 68, 69, 81, 84		
Multiplication can be represented as repeated addition, scaling, or arrays, and larger numbers can be multiplied using an area model or column multiplication.	Using place value and known and derived facts to multiply and divide mentally, including multiplying by 0 and 1 and dividing by 1				63, 65, 66, 67, 69, 73, 81, 82, 83, 84, 85, 86, 88, 90		
	Multiplying two-digit and three-digit numbers by a one-digit number				66, 67, 68, 85		
	Dividing up to a three-digit whole number by a one-digit divisor, with no remainder				62, 63, 87, 88, 90		
Number — Rational Numbers				Term 1	Term 2	Term 3	Term 4
The base 10 number system continues past the ones column, to the right, to create decimals such as tenths. Decimals are fractions that have powers of 10 as their denominators, and they can be written as numbers using a decimal point. A decimal point marks the column immediately to the right of the ones column as the tenths column. Tenths can be created by dividing whole numbers by 10 and can be expressed as fractions or decimals.	Reading, writing and representing tenths as fractions and decimals				51, 54		
	Comparing and ordering tenths as fractions and decimals						
	Memorising and using the decimal equivalent of $\frac{1}{2}$ and fractions with denominators of 10						
	Dividing one- and two-digit whole numbers by 10 to make decimals and identify tenths						
	Multiplying decimal tenths by 10						
	Comparing and ordering fractions with the same numerator or same denominator				50, 52, 54, 55, 56		
Improper fractions and mixed numbers are different representations of the same quantity.	Relating fractions, improper fractions and mixed numbers to their position on a number line				57, 58		
	Identifying when two fractions are equivalent, using representations				55, 56		
Addition and subtraction of fractions with the same denominator follow the same principles as whole numbers and can result in improper fractions or whole numbers.	Adding and subtracting fractions with the same denominators, including beyond a whole						
	Adding and subtracting decimals to one decimal place						
Scaling changes quantities proportionally, using multiplication and division.	Using known multiplication and division facts to scale a quantity (e.g. to double or halve a recipe)				59		
	Finding a unit fraction of a whole number, using multiplication and division facts and where the answer is a whole number				53, 54, 62, 89		
	Finding the whole set or amount when given a unit fraction, using multiplication and division facts				53, 89		
Number — Financial mathematics				Term 1	Term 2	Term 3	Term 4
New Zealand currency is a decimal system of dollars made up of 100 cents.	Calculating the total cost of several items costing whole-dollar amounts and with different prices, or of multiples of the same item, including giving change		2, 33, 38		86		
	Representing amounts of currency using different combinations of denominations						
Algebra — Equations and relationships				Term 1	Term 2	Term 3	Term 4
Numbers can be compared using "greater than" (>), "less than" (<), and equals (=). Applying the same operation to both sides of a number sentence preserves the balance.	Checking the truth of number sentences and completing open number sentences involving addition and subtraction		9, 17, 39				
	Checking the truth of number sentences and completing open number sentences involving multiplication and division				65, 87, 89		
Growing patterns can increase or decrease by the addition or subtraction of a constant (arithmetically) or multiplication or division by a constant (geometrically).	Recognising, continuing, creating and describing growing patterns (including numerical and non-numerical patterns) that change by adding, subtracting, or multiplying by a constant whole number		22, 23, 24, 25, 36		70, 71, 72, 73		

Year 4 Knowledge and Practices

The New Zealand Curriculum Mathematics and Statistics 2025

Knowledge		Practices	Student Pages			
Measurement — Measuring			Term 1	Term 2	Term 3	Term 4
<p>Phase 1: Standard measuring units are universally agreed and commonly used units for making measurements that enable people to communicate clearly. Measuring tools are usually marked with standard units to ensure consistent measurements of properties such as length, mass (weight) and capacity.</p>	Estimating and measuring length (cm and m), mass (g and kg) and capacity (mL and L), using tools with labelled markings and whole-number metric units	43, 44, 45, 46	91			
	Comparing and ordering objects using whole-number metric units of length, mass, or capacity	43, 44				
<p>Phase 2: Different measurement tools and scales use different-sized units; the unit must be recorded with the measurement amount.</p>	Using familiar objects and experiences to create estimation benchmarks	47	93			
	Using the appropriate tool for measuring length, mass (weight) and capacity in mixed units	46	91, 92, 94, 95			
	Measuring temperature in degrees Celsius					
	Measuring the perimeter of polygons using metric units (mm, cm and m)					
The areas of rectangles (including squares) can be calculated by multiplication of side lengths.	Measuring the areas of irregular shapes covered with squares and half squares					
	Calculating the areas of rectangular figures (including squares) using multiplication of side lengths					
Volume is a measure of regions in three-dimensional space.	Measuring the volumes of rectangular prisms (cuboids) by filling them with identical 3D blocks					
Angles are a measure of turn and can be measured using the unit of degrees; a full turn is 360 degrees, a half turn is 180 degrees and a quarter turn is 90 degrees. Rectangles and squares have four right angles.	Estimating the size of angles by comparing them to 90, 180 and 360 degrees					
A point in time is typically measured in hours and minutes past midnight. Clocks relate seconds to minutes and minutes to hours according to a system based on 60.	Telling the time on analogue and digital clocks to the nearest minute					
	Measuring duration in hours, minutes and seconds, including mixed time units					
	Finding equivalent durations of time using different units					
Geometry — Shapes			Term 1	Term 2	Term 3	Term 4
A regular polygon is a two-dimensional shape with all sides of equal length and all interior angles of equal measure.	Identifying, classifying and describing the attributes of regular and irregular polygons of up to 12 sides, using edges, vertices and angles					
Circles have an infinite number of lines of symmetry.	Identifying the number of lines of symmetry in 2D shapes					
Geometry — Spatial reasoning			Term 1	Term 2	Term 3	Term 4
Shapes may appear different when viewed from a different perspective.	Visualising 3D shapes and connecting them with 2D diagrams, verbal descriptions and the same shapes drawn from different perspectives	28, 29, 30, 31, 32				
A reflection is when a shape is flipped over a line, creating a mirror image. A translation is when a shape is slid from one place to another without being turned. A rotation is when a shape is turned around a fixed point.	Performing one-step transformations (reflections, translations, rotations) on 2D shapes					
Geometry — Pathways			Term 1	Term 2	Term 3	Term 4
<p>Phase 1: Maps are 2D representations of places in the world showing the view from above with symbols to show locations and landmarks. Paths can be described using sequenced instructions for moving or locating an object. Directions such as forward, left and right depend on the orientation of the observer.</p>	Following and creating a sequence of step-by-step instructions for moving people or objects to a different location, including half and quarter turns and the distance to be travelled		78, 80			
	Using simple maps to locate objects and places relative to other objects and places		76, 77, 78			
<p>Phase 2: An alphanumeric grid reference is a system that divides a map into labelled rows (letters) and columns (numbers), so that each square can be identified by combining a letter and a number (e.g. A1, B2).</p>	Use alphanumeric and general grid references to identify regions and plot positions on a grid map		76, 77, 78, 79, 80			
Statistics — Developing knowledge from data			Term 1	Term 2	Term 3	Term 4
A variable is an attribute or measurement of the people or objects being studied: categorical variables classify objects or individuals into groups, discrete numerical variables are counted, continuous numerical variables are measured.	Collecting numerical data, and, if needed, rounding to an appropriate unit or part of a unit, based on the context					
Statistics — Visualisation of data			Term 1	Term 2	Term 3	Term 4
Data visualisations are representations of all available values for a variable showing the frequency for each value. Data visualisations show patterns, trends and variations. Numerical data can be visualised with dot plots or bar graphs. A good data visualisation includes, where appropriate: a title that gives the purpose of the visualisation, variable(s) (e.g. labelled on the axis), the group the data is from, units for a numerical variable, values or categories, frequency, with the scale starting at 0.	Creating dot-plot or bar-graph data visualisations					
Statistics — Interpretation of data			Term 1	Term 2	Term 3	Term 4
Interpreting a data visualisation includes describing its variables and their units, the context for the data, and the visualisation's key features: its shape (e.g. the number of peaks), its middle group(s) (where the middle of the data lies), its spread (how spread the data is from the minimum (lowest) value to the maximum (highest) value).	Answering questions about the frequency of a particular value in dot plots					
	Answering questions about individual values in a dot plot, while referring to the context					
	Interpreting data visualisations					
	Distinguishing between when to use a particular value or the frequency for a given value when answering questions about dot plots					



Year 4

Term 1


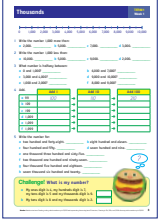
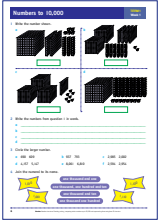
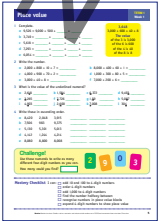
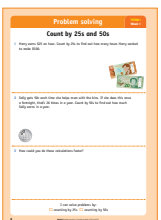
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Term 1 Teaching Overview Weeks 1–9

Week & Unit	High-Level Curriculum Focus	Student Book and Online lessons	Resources
Week 1 Number: Number structures: Numbers to 10,000	Number Number structures Reading, writing, comparing, and ordering whole numbers up to 10,000 and representing them using base 10 structure Rounding whole numbers to the nearest thousand, hundred Counting in 10s, 100s, and 1,000s from any whole number up to 10,000 Counting forwards in 25s and 50s	Pages 2–6 Mathletics Number Structure	Place-value charts Base 10 blocks 0–9 digits on cards Number lines Mini whiteboards
Week 2 Number: Number structures: Four-digit numbers	Number Number structures Reading, writing, comparing, and ordering whole numbers up to 10,000 and representing them using base 10 structure Rounding whole numbers to the nearest thousand, hundred, or ten Rounding can support predicting or estimating the result of a calculation Algebra Equations and relationships Checking the truth of number sentences	Pages 7–11 Mathletics Number Structure	Numeral expanders Place-value chart Base 10 blocks 0–9 digits on cards Number lines Mini whiteboards
Week 3 Number: Operations: Addition	Number Operations Addition can be carried out mentally, using known facts, place value and partitioning, or column methods Standard written algorithms rely on place value, regrouping, and renaming	Pages 12–16 Mathletics Operations: Add and Subtract	Number lines Tens frames Base 10 blocks Mini whiteboards Counters
Week 4 Number: Operations: Subtraction	Number Operations Subtraction can be carried out mentally, using known facts, place value and partitioning, or column methods Standard written algorithms rely on place value, regrouping, and renaming Algebra Equations and relationships Completing open number sentences	Pages 17–21 Mathletics Operations: Add and Subtract	Number lines Tens frames Base 10 blocks Mini whiteboards Counters
Week 5 Algebra: Equations and relationships: Patterns	Algebra Equations and relationships Recognising, continuing, creating, and describing growing patterns (including numerical and non-numerical patterns) that change by adding, subtracting or multiplying by a constant whole number Number Number structures Counting forwards in 2s, 4s, 5s	Pages 22–25 Mathletics Algebra	Place-value charts Counters Mini whiteboards
Checkpoint 1 Mid-term review	Assessment and Review Review numbers to 10,000, addition, subtraction and patterns	Pages 26–27	
Week 6 Geometry: Spatial reasoning: 3D shapes	Geometry Spatial reasoning Visualising 3D shapes and connecting them with 2D diagrams, verbal descriptions, and the same shapes drawn from different perspectives	Pages 28–32 Mathletics Geometry	3D shape models Building blocks Shape cards Mini whiteboards
Week 7 Number: Operations: More subtraction	Number Operations Adding and subtracting up to four-digit numbers Number Financial mathematics Calculating change; Representing amounts of currency using different combinations of denominations Algebra Equations and relationships Recognising and continuing growing patterns (including numerical patterns)	Pages 33–37 Mathletics Operations: Add and Subtract	Number lines Counters/cubes Place-value charts Base 10 blocks Mini whiteboards
Week 8 Number: Operations: More addition	Number Operations Adding and subtracting up to four-digit numbers Number Financial mathematics Calculating the total cost of several items with different prices, including giving change Algebra Equations and relationships Completing open number sentences involving addition	Pages 38–42 Mathletics Operations: Add and Subtract	Number lines Counters/cubes Base 10 blocks Place value charts Play money Mini whiteboards
Week 9 Measurement: Measuring: Length	Measurement Measuring Estimating and measuring length (cm and m), using tools with labelled markings and whole-number metric units Comparing and ordering objects using whole-number metric units of length Using familiar objects (e.g. body parts) to create estimation benchmarks; Using the appropriate tool for measuring length	Pages 43–47 Mathletics Measuring Length	Rulers Tape measures Metre sticks Classroom objects for measuring
Checkpoint 2 End-of-term review	Assessment and Review Review numbers to 10,000, addition, subtraction, patterns, 3D shapes and length	Pages 48–49	

Term 1 Week 1 Overview Number: Number structures: Numbers to 10,000

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Dollar amounts	Whole numbers can be read, written, compared and ordered using base-10 place value to 10,000.	<ul style="list-style-type: none"> ✓ Read and write dollar amounts to 10,000 ✓ Compare and order amounts of money ✓ Add and subtract simple amounts mentally ✓ Identify amounts closest to a given value 	<ul style="list-style-type: none"> – Compare wallet amounts using place value – Order money from least to greatest – Add \$10 and subtract \$100 mentally – Identify amounts closest to \$100 and \$1,000 	<p>Page 2: Compare and order dollar amounts; add \$10; subtract \$100; identify closest values.</p> 
2 Thousands	Numbers increase and decrease in thousands following base-10 place value patterns.	<ul style="list-style-type: none"> ✓ Find 1,000 more or less ✓ Identify halfway points between thousands ✓ Add 1, 10 and 100 using place value ✓ Read and write numbers in words and numerals 	<ul style="list-style-type: none"> – Use number line to explore thousands – Add and subtract 1,000 mentally – Find halfway between thousands – Write numbers in words and digits 	<p>Page 3: 1,000 more/less; halfway between; add 1, 10, 100; write numbers in words and numerals.</p> 
3 Numbers to 10,000	Whole numbers to 10,000 can be represented using base-10 structure.	<ul style="list-style-type: none"> ✓ Read numbers using thousands, hundreds, tens and ones ✓ Write numbers in words and numerals ✓ Compare and identify larger numbers ✓ Match numerals to place-value names 	<ul style="list-style-type: none"> – Build numbers with base-10 blocks – Read and write numbers to 10,000 – Compare numbers – Match numerals to written names 	<p>Page 4: Write numbers shown; write in words; compare numbers; match numerals to names.</p> 
4 Place value	Each digit has a value based on its position in the base-10 system.	<ul style="list-style-type: none"> ✓ Expand numbers into thousands, hundreds, tens and ones ✓ Identify value of a digit ✓ Order four-digit numbers ✓ Add 10, 100 and 1,000 using place value 	<ul style="list-style-type: none"> – Expand numbers using place-value charts – Identify digit values – Order numbers – Apply place-value reasoning to add 10, 100 and 1,000 	<p>Page 5: Expand numbers; find value of digits; order numbers; place-value calculations.</p> 
5 Problem solving – Count by 25s and 50s	Counting in 25s and 50s creates predictable patterns that help solve money problems efficiently.	<ul style="list-style-type: none"> ✓ Count forward in 25s and 50s ✓ Use skip-counting to solve money problems ✓ Recognise repeated-addition patterns ✓ Explain a faster strategy 	<ul style="list-style-type: none"> – Skip-count in 25s and 50s – Solve money problems – Use patterns to calculate totals – Discuss faster strategies using multiplication 	<p>Page 6: Solve problems using counting in 25s and 50s; explain strategy.</p> 

Unit: Number structures: Numbers to 10,000

Focus: Reading, writing, comparing and ordering whole numbers to 10,000, understanding place value, using rounding, and applying number patterns to money and problem solving.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Place Value to 10,000	Students understand that each digit has a value based on its position (thousands, hundreds, tens, ones).	Correctly expands numbers (e.g. $3,648 = 3,000 + 600 + 40 + 8$); identifies value of digits; explains place-value reasoning.
Reading and Writing Numbers	Students can read, write and represent numbers to 10,000 using base-10 structure.	Writes numbers in words and numerals accurately; matches numerals to place-value names; represents numbers using base-10 models.
Comparing and Ordering Numbers	Students compare and order whole numbers using place-value understanding.	Correctly orders numbers; explains which digit determines the larger number; uses $<$, $>$, $=$ appropriately.
Number Patterns and Place Value Changes	Students recognise patterns when adding or subtracting 1, 10, 100 and 1,000.	Correctly identifies which digit changes; applies patterns to find 1,000 more/less; explains reasoning using place-value language.
Money and Real-World Number Use	Students apply place value and number skills to money and real-life contexts.	Correctly compares money amounts; adds or subtracts simple values mentally; identifies closest value (e.g. to \$100 or \$1,000).
Problem Solving with Number Patterns	Students use skip-counting (25s, 50s, 100s) and place-value strategies to solve problems.	Uses efficient counting strategies; explains pattern-based reasoning; solves money and number problems accurately.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation (Formative)	Watch students represent and expand four-digit numbers using place-value charts or base-10 materials.	Are students correctly identifying thousands, hundreds, tens and ones? Can they explain digit value clearly?
Oral Check	Ask: 'Which is larger, 3,482 or 3,842? How do you know?' or 'What is 1,000 more than 5,276?'	Listen for correct use of place-value vocabulary: thousands, hundreds, digit, value, greater, less.
Written Work	Review Student Book pp. 2–6.	Check correct number reading/writing, ordering, place-value expansion, rounding and problem-solving accuracy.
Practical Task	Money comparison task: Provide different dollar amounts and ask students to order them and find closest to \$1,000.	Can students compare using place value? Do they use rounding or estimation appropriately?
Exit Ticket/Quick Quiz	Provide 5 short mixed questions covering place value, ordering, rounding and number patterns.	Identify students needing reinforcement in place value, rounding or pattern reasoning.

Quick Quiz / Exit Ticket (5 Questions)

- Write this number in expanded form: 4,372
- Which number is larger: 5,409 or 5,490? Explain.
- What is 1,000 more than 6,285?
- Round 3,648 to the nearest hundred.
- Count by 50s: 200, 250, ____, ____, ____

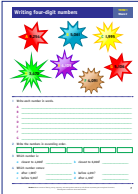
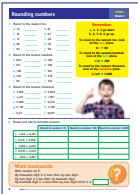
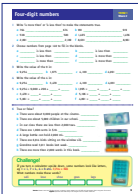
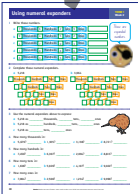

Teaching as Inquiry: Reflection Notes

Reflection Prompts

- Students confidently reading, writing and expanding numbers to 10,000:
- Students confidently comparing, ordering and rounding numbers:
- Students successfully applying place value to money and real-life contexts:
- Students needing support (e.g. place value, digit value, rounding, number patterns):
- Misconceptions noticed (e.g. digit size confusion, incorrect rounding, ordering by last digit):

Notes/Next Steps

Term 1 Week 2 Overview Number structures: Four-digit numbers

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Writing four-digit numbers	Four-digit numbers can be read, written, compared and ordered using thousands, hundreds, tens and ones.	<ul style="list-style-type: none"> ✓ Read four-digit numbers correctly ✓ Write four-digit numbers in words ✓ Order four-digit numbers from smallest to largest ✓ Identify numbers before and after ✓ Use place value to identify numbers closest to benchmark values 	<ul style="list-style-type: none"> – Read numbers shown on the page – Write numbers in words – Order numbers in ascending order – Identify numbers closest to 4,000 and 6,000 – Find numbers before and after given four-digit numbers 	<p>Page 7: Write numbers in words; order numbers in ascending order; identify closest numbers; write numbers before and after.</p> 
2 Rounding numbers	Rounding uses place value to estimate whole numbers to the nearest 10, 100 or 1,000.	<ul style="list-style-type: none"> ✓ Round numbers to the nearest 10 ✓ Round numbers to the nearest 100 ✓ Round numbers to the nearest 1,000 ✓ Explain which digit to look at when rounding ✓ Use rounding to estimate addition answers 	<ul style="list-style-type: none"> – Use rounding rules: 1–4 round down, 5–9 round up – Round numbers to nearest 10, 100 and 1,000 – Use number lines and place value to justify rounding – Round and add to estimate totals – Solve a work-backwards digit challenge 	<p>Page 8: Round to nearest 10, 100 and 1,000; round and add to estimate; solve place-value challenge.</p> 
3 Four-digit numbers	Four-digit numbers can be compared, represented and explained using place value.	<ul style="list-style-type: none"> ✓ Compare numbers using 'is more than' and 'is less than' ✓ Identify the value of a digit ✓ Write numbers in expanded form ✓ Check whether number statements are true or false ✓ Use reasoning to explain number relationships 	<ul style="list-style-type: none"> – Complete comparison statements – Choose numbers to make true 'more than' and 'less than' sentences – Identify digit values in different numbers – Write numbers in expanded form – Check true or false real-world number statements – Explore calculator-word challenge 	<p>Page 9: Compare four-digit numbers; identify digit values; write expanded form; check true/false statements; solve calculator challenge.</p> 
4 Using numeral expanders	Four-digit numbers can be represented, partitioned and renamed using thousands, hundreds, tens and ones.	<ul style="list-style-type: none"> ✓ Use numeral expanders to make four-digit numbers ✓ Write numbers from thousands, hundreds, tens and ones ✓ Partition numbers in different ways ✓ Identify how many thousands, hundreds, tens and ones are in a number ✓ Use place value to rename numbers flexibly 	<ul style="list-style-type: none"> – Write numbers from numeral expanders – Complete numeral expanders for given numbers – Rename 5,218 in different place-value ways – Identify how many thousands, hundreds, tens and ones are in numbers – Discuss the difference between 'the tens digit' and 'how many tens' 	<p>Page 10: Write numbers from expanders; complete numeral expanders; rename numbers; identify how many thousands, hundreds, tens and ones.</p> 
5 Te reo Māori numbers	Whole numbers up to 10,000 can be read, written and represented using Te reo Māori number words and base-10 place value.	<ul style="list-style-type: none"> ✓ Read and write numbers from 1 to 10 in Te reo Māori ✓ Match Te reo Māori words to 1, 10, 100 and 1,000 ✓ Identify the word for thousand ✓ Use place value to read and write four-digit numbers in Te reo Māori ✓ Reflect on understanding of four-digit numbers and rounding 	<ul style="list-style-type: none"> – Match te reo Māori number words to numerals – Identify tekau, rau and mano – Complete a place-value table using te reo Māori – Write numbers from te reo Māori words – Write four-digit numbers in te reo Māori – Complete mastery checklist 	<p>Page 11: Write te reo Māori numbers as numerals; match place-value words; complete place-value table; translate between numerals and te reo Māori; complete mastery checklist.</p> 

Unit: Number structures: Four-digit numbers

Focus: Reading, writing, comparing and ordering four-digit numbers; understanding digit value and numeral expanders; rounding to the nearest ten, hundred and thousand; estimating by rounding; representing numbers flexibly using thousands, hundreds, tens and ones; and reading and writing numbers over 1,000 in te reo Māori.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Reading and Writing Four-Digit Numbers	Students can read and write four-digit numbers in numerals and words.	Writes numbers such as 5,061 and 4,091 accurately in words; uses zero correctly as a placeholder; reads numbers without reversing or omitting digits.
Comparing and Ordering Numbers	Students compare and order four-digit numbers using place-value understanding.	Correctly orders numbers in ascending order; explains comparisons by referring to thousands, hundreds, tens and ones; uses 'is more than' and 'is less than' accurately.
Digit Value	Students understand that a digit's value depends on its position in the number.	Identifies the value of digits, e.g. the 9 in 9,254 is 9,000, while the 9 in 4,091 is 90; explains that the same digit can have different values.
Expanded Form and Numeral Expanders	Students represent four-digit numbers using expanded form and numeral expanders.	Writes numbers such as 7,629 as $7,000 + 600 + 20 + 9$; completes numeral expanders; explains how thousands, hundreds, tens and ones combine.
Flexible Place-Value Renaming	Students understand that numbers can be renamed using different place-value groupings.	Identifies how many thousands, hundreds, tens or ones are in a number, e.g. 5,920 has 592 tens; explains the difference between 'the tens digit' and 'how many tens.'
Rounding and Estimation	Students round whole numbers to the nearest ten, hundred and thousand and use rounding to estimate.	Correctly identifies the digit to check when rounding; explains why numbers round up or down; estimates sums by rounding addends first.
Te reo Māori Numbers	Students read, write and match te reo Māori number words for ones, tens, hundreds and thousands.	Matches tahi, tekau, kotahi rau and kotahi mano to 1, 10, 100 and 1,000; writes four-digit numbers in te reo Māori using place-value order.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation – Formative	Watch students write four-digit numbers in words and digits during Student Book work.	Are students reading numbers with zeros correctly? Do they understand the role of zero as a placeholder?
Oral Check	Ask: 'Which is greater, 4,109 or 4,091? How do you know?'	Listen for comparison from left to right: thousands, hundreds, tens, then ones.
Written Work	Review Student Book pages 7–11.	Check accuracy with writing numbers in words, ordering, digit value, expanded form, rounding and te reo Māori number writing.
Te reo Māori Match	Students match numerals to te reo Māori words and write one four-digit number in te reo Māori.	Can students identify mano, rau and tekau? Can they keep the number in place-value order?
Exit Ticket/ Quick Quiz	Provide 5 short mixed questions covering place value, rounding, expanded form and te reo Māori numbers.	Identify students needing reinforcement in digit value, rounding, renaming or te reo Māori number structure.

Quick Quiz / Exit Ticket (5 Questions)

- Write 4,091 in words.
- Which number is greater: 5,061 or 5,106?
Explain how you know.
- Write 9,254 in expanded form.
- Round 5,650 to the nearest thousand.
- What is the te reo Māori word for 1,000?

Teaching as Inquiry: Reflection Notes

Reflection Prompts

Students confidently comparing and ordering four-digit numbers using place value:

Students accurately identifying digit value in thousands, hundreds, tens and ones places:

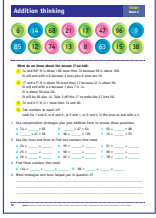
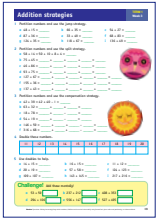
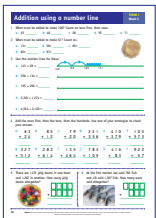
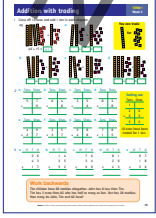
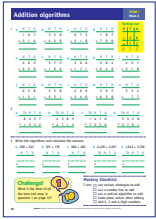
Students successfully using expanded form and numeral expanders:

Students successfully reading and writing numbers in te reo Māori:

Students needing support with place value, digit value, zero placeholders, rounding or te reo Māori number words:

Notes/Next Steps

Term 1 Week 3 Overview Operations: Addition

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Addition	Addition problems can be solved efficiently by using known facts, compensation and place value strategies.	<ul style="list-style-type: none"> ✓ Use addition facts to solve missing-number problems ✓ Use compensation to add more efficiently ✓ Find two or three numbers that make a given total ✓ Explain the strategy used ✓ Check whether the total is correct 	<ul style="list-style-type: none"> – Explore compensation with numbers close to 10, 50 and 100 – Solve missing-number addition problems – Find two numbers and three numbers that total a given amount – Discuss efficient mental strategies 	<p>Page 12: Use compensation strategies and addition facts to solve totals and missing-number problems.</p> 
2 Addition strategies	Numbers can be partitioned and recombined to make addition easier and different strategies can be used flexibly depending on the numbers involved.	<ul style="list-style-type: none"> ✓ Use the jump strategy to add numbers ✓ Use the split strategy to partition numbers and add parts ✓ Use compensation to make addition easier ✓ Use doubles and near doubles to help solve addition facts ✓ Explain which strategy was used and why 	<ul style="list-style-type: none"> – Partition numbers and use jump strategy – Use split strategy with tens and ones – Use compensation with near-friendly numbers – Double and near-double numbers – Solve mental addition challenge questions 	<p>Page 13: Use jump, split, compensation and doubles strategies to solve addition problems.</p> 
3 Addition using a number line	Addition can be solved by counting on in tens, ones and hundreds and number lines and place value help make larger additions easier.	<ul style="list-style-type: none"> ✓ Use a number line to count on and add numbers ✓ Work out what must be added to make 100 or \$1 ✓ Partition numbers into ones, tens and hundreds ✓ Add larger numbers using place value ✓ Explain how jumps and strategies worked 	<ul style="list-style-type: none"> – Count on to make 100 – Count on to make \$1 – Use number lines for larger additions – Add using ones, tens and hundreds – Solve real-life addition word problems 	<p>Page 14: Use number lines and place value to add numbers and solve missing-addend and word problems.</p> 
4 Addition with trading	When adding ones, 10 ones can be traded for 1 ten and this helps solve addition problems with regrouping accurately.	<ul style="list-style-type: none"> ✓ Add numbers using tens and ones ✓ Trade 10 ones for 1 ten ✓ Use diagrams to show regrouping ✓ Solve written addition problems with trading ✓ Explain why trading works 	<ul style="list-style-type: none"> – Use base-ten diagrams to show regrouping – Trade 10 ones for 1 ten – Solve tens-and-ones addition problems – Explore a working-backwards reasoning problem – Explain regrouping using place value 	<p>Page 15: Use diagrams and place value charts to solve addition with trading.</p> 
5 Addition algorithms	The vertical addition algorithm uses place value to organise numbers and solve addition problems accurately.	<ul style="list-style-type: none"> ✓ Line up numbers correctly in hundreds, tens and ones columns ✓ Use the vertical algorithm to add 2-digit and 3-digit numbers ✓ Regroup when the ones or tens total more than 9 ✓ Explain why place value helps in written addition ✓ Check whether an answer is reasonable 	<ul style="list-style-type: none"> – Set out addition algorithms in HTO columns – Add 2-digit and 3-digit numbers – Regroup in ones and tens – Write and solve vertical algorithms – Complete challenge question using tens and ones totals 	<p>Page 16: Use the vertical algorithm to add 2-digit and 3-digit numbers with regrouping.</p> 

Unit: Number structures, Operations

Focus: Using flexible addition strategies, counting on with number lines, regrouping with tens and ones, and applying the vertical addition algorithm to solve 2-digit and 3-digit addition problems accurately and efficiently.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Known Facts and Mental Addition	Students use known addition facts to support larger calculations.	Uses basic facts quickly and applies them to solve near doubles, compensation and missing-number problems.
Addition Strategy Use	Students understand that there are a range of strategies to make addition easier.	Solves problems using a range of strategies.
Making 100 and \$1	Students can find how much more is needed to make a target whole amount.	Correctly works out what must be added to make 100 or \$1 and explains the counting-on strategy.
Trading/Regrouping	Students understand that 10 ones can be traded for 1 ten.	Uses diagrams or materials to regroup correctly and explains why trading works.
Vertical Addition Algorithm	Students can set out and solve 2-digit and 3-digit addition problems using columns and place value.	Lines up digits correctly in HTO columns, regroups accurately and solves algorithms correctly.
Explaining Strategy Choice	Students can explain why a particular addition strategy is efficient for a given problem.	Gives a sensible reason for choosing jump, split, compensation, doubles or algorithm.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation (Formative)	Watch students solve addition tasks using jump, split, compensation, regrouping diagrams and vertical algorithms.	Do students choose suitable strategies? Can they partition and regroup accurately?
Oral Check	Ask: ‘Why is 39 easy to change to 40?’ ‘How many ones make one ten?’ ‘Why do we line up HTO columns?’ ‘How do doubles help?’	Listen for correct use of terms such as compensation, jump, split, doubles, regroup, hundreds, tens, ones, total.
Written Work	Review Student Book Pages 12–16.	Check missing-number solutions, partitioned addition, number-line jumps, regrouping diagrams and vertical algorithm accuracy.
Practical Task	Use base-ten blocks, open number lines, place value mats and addition cards.	Can students model addition concretely and connect materials to written methods?
Exit Ticket/ Quick Quiz	Provide 5 short questions covering addition strategies, regrouping and algorithms.	Identify students secure with flexible strategies and those needing more support with regrouping or column setup.

Quick Quiz / Exit Ticket (5 Questions)

- Use compensation to solve:
 $42 + 39$
- What do you add to 74 to make 83?
- What must be added to 65c to make \$1?
- How many ones can be traded for 1 ten?
- Solve using vertical addition:
 $167 + 314$

Teaching as Inquiry: Reflection Notes

Reflection Prompts

Students confidently using a range of strategies to solve addition problems:

Students able to choose between jump, split, compensation and doubles strategies:

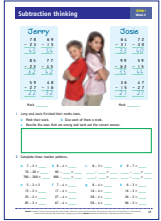
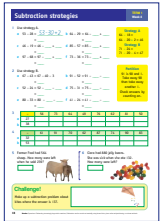
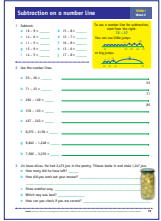
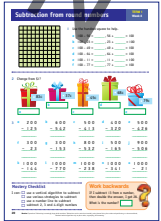
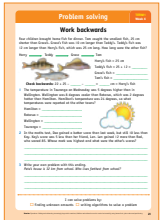
Misconceptions noticed (e.g. adding without place value alignment, forgetting to compensate back, difficulty with regrouping, confusion between jump and split strategies):

Adjustments for future lessons (e.g. more open number line work, more regrouping with materials, more algorithm setup practice, more strategy comparison discussions):

Notes/Next Steps



Term 1 Week 4 Overview Operations: Subtraction

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Subtraction thinking	Subtraction can be checked for accuracy using place value and known facts and subtraction patterns help build fluency with related number sentences.	<ul style="list-style-type: none"> ✓ Solve two-digit subtraction problems accurately ✓ Check whether a subtraction answer is correct ✓ Correct subtraction mistakes ✓ Use subtraction patterns to solve related facts ✓ Explain how place value helps with subtraction 	<ul style="list-style-type: none"> – Mark worked subtraction examples – Identify correct and incorrect answers – Rewrite incorrect questions and solve them correctly – Complete related subtraction patterns using ones, tens and hundreds – Discuss what stays the same and what changes in the patterns 	<p>Page 17: Check subtraction work, correct errors and complete subtraction patterns.</p> 
2 Subtraction strategies	Subtraction can be solved efficiently by partitioning numbers and using compensation strategies.	<ul style="list-style-type: none"> ✓ Use partitioning to solve subtraction problems ✓ Use compensation to subtract friendly numbers and adjust the answer ✓ Explain the difference between two subtraction strategies ✓ Solve subtraction tables accurately ✓ Use subtraction strategies in word problems 	<ul style="list-style-type: none"> – Use compensation – Use partitioning – Solve subtraction tables – Apply subtraction in practical word problems – Compare which strategy is more efficient 	<p>Page 18: Use compensation and partitioning strategies to solve subtraction problems and tables.</p> 
3 Subtraction on a number line	Subtraction can be solved on a number line by counting back in jumps and place value helps make subtraction more efficient.	<ul style="list-style-type: none"> ✓ Use a number line to subtract numbers ✓ Count back using small jumps or big jumps ✓ Partition a subtraction number into tens and ones ✓ Solve larger subtraction problems using place value ✓ Explain which subtraction method works best 	<ul style="list-style-type: none"> – Use number lines for simple subtraction – Count back with small jumps and larger place-value jumps – Partition numbers into tens and ones – Solve subtraction word problems – Compare different subtraction methods 	<p>Page 19: Use number lines to subtract and explain strategies for subtraction problems.</p> 
4 Subtraction from round numbers	Three-digit subtraction can be solved using place value, complements and written algorithms and checking with inverse thinking helps confirm answers.	<ul style="list-style-type: none"> ✓ Find complements to 100 ✓ Work out change from \$1 ✓ Subtract 2-digit and 3-digit numbers using a vertical algorithm ✓ Solve a working-backwards subtraction problem ✓ Check the answer using addition or inverse thinking 	<ul style="list-style-type: none"> – Find complements to 100 using a hundred square – Find change from \$1 – Solve 2-digit and 3-digit subtraction algorithms – Use inverse operations to check – Solve a working-backwards problem 	<p>Page 20: Use complements, subtraction algorithms, change from \$1 and inverse thinking in subtraction.</p> 
5 Problem solving – Work backwards	Some problems are easier to solve by starting with the known information and working backwards step by step.	<ul style="list-style-type: none"> ✓ Identify the known information in a problem ✓ Work backwards step by step to find unknown amounts ✓ Use addition and subtraction to solve linked problems ✓ Check answers by reversing the steps ✓ Explain why working backwards helps 	<ul style="list-style-type: none"> – Solve linked clue problems – Use more than, less than and half clues – Check answers in reverse order – Compare scores, temperatures and lengths – Write a new work-backwards problem 	<p>Page 21: Solve multi-step word problems by working backwards and checking in reverse.</p> 

Unit: Operations: Subtraction

Focus: Checking subtraction for accuracy, using place value and related facts, applying compensation and partitioning strategies, subtracting on number lines, solving 2-digit and 3-digit subtraction problems, and using working-backwards reasoning in multi-step contexts.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Choosing a Strategy	Students can choose between compensation, partitioning or number-line methods depending on the numbers involved.	Selects a sensible strategy and explains why it is efficient.
Three-Digit Subtraction	Students can solve subtraction problems involving 2-digit and 3-digit numbers using place value and written methods.	Correctly lines up place values and subtracts accurately in written form.
Complements and Change	Students understand that subtraction can be used to find the complement to 100 or the change from \$1.	Finds missing amounts to 100 or 100 cents accurately and explains the connection.
Working Backwards	Students can start with known information and work backwards step by step to solve unknown-value problems.	Correctly follows clue relationships, reverses steps in order and checks solutions logically.
Explaining Subtraction Reasoning	Students can describe how their subtraction strategy works.	Uses clear language such as difference, tens, ones, compensation, partition, check and working backwards.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation (Formative)	Watch students check worked subtraction, solve subtraction tables, use number lines and complete work-backwards tasks.	Do students use place value accurately? Can they choose and explain a suitable subtraction strategy?
Oral Check	Ask: ‘Why do we add back after subtracting 30 instead of 28?’ ‘How do big jumps help on a number line?’ ‘What must be added to 56 to make 100?’ ‘Why do we start with the known amount when working backwards?’	Listen for correct use of terms such as difference, partition, compensation, count back, complement, inverse, work backwards.
Written Work	Review Student Book Pages 12–16.	Check subtraction accuracy, corrected errors, completed patterns, number-line jumps, complements, written subtraction and logical work-backwards reasoning.
Practical Task	Use number lines, hundred charts, place value blocks and clue cards.	Can students model subtraction with materials and connect the model to written strategies?
Exit Ticket/ Quick Quiz	Provide 5 short questions covering subtraction facts, strategy use, complements and inverse checking.	Identify students secure with subtraction methods and those needing more support with place value, strategy choice or work-backwards reasoning.

Quick Quiz / Exit Ticket (5 Questions)

- Solve: $78 - 23$
- Use compensation to solve: $53 - 28$
- What is $100 - 56$?
- How much change from \$1 is $83c$?
- A number minus 13 equals 14. What is the number?

Teaching as Inquiry: Reflection Notes

Reflection Prompts

Students correctly solving 2-digit and 3-digit subtraction algorithms:

Students understanding complements to 100 and change from \$1:

Students able to solve multi-step problems by working backwards:

Students checking subtraction answers using inverse addition:

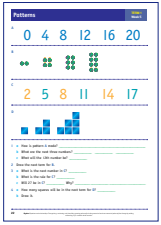
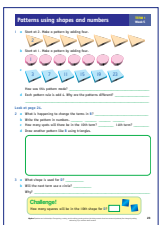
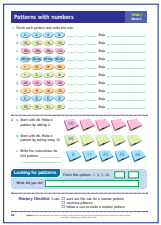
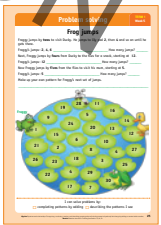
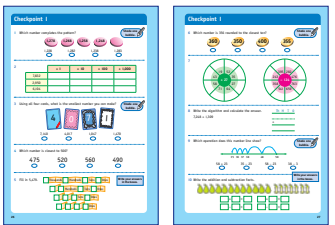
Misconceptions noticed (e.g. subtracting digits without regard to place value, forgetting to adjust after compensation, miscounting jumps on a number line, difficulty reversing steps in work-backwards problems):

Adjustments for future lessons (e.g. more place value materials, more number-line subtraction, more compensation practice, more inverse checking, more scaffolded multi-step problems):

Notes/Next Steps



Term 1, Week 5 Overview Algebra: Equations and relationships: Patterns

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Patterns	Patterns grow when numbers change by a constant amount, and the rule helps us continue the pattern.	<ul style="list-style-type: none"> ✓ Recognise growing patterns ✓ Identify the rule ✓ Continue patterns ✓ Predict next terms ✓ Describe how patterns grow 	<ul style="list-style-type: none"> – Identify pattern rules – Continue numerical patterns – Predict future terms – Use visual models – Explain rule using numbers 	<p>Page 22: Identify rules, continue patterns and predict future numbers.</p> 
2 Patterns using shapes and numbers	A pattern rule describes how numbers change, and the rule can be used to continue or create patterns.	<ul style="list-style-type: none"> ✓ Identify pattern rule ✓ Continue patterns ✓ Create patterns ✓ Explain rule clearly ✓ Apply rule to new situations. 	<ul style="list-style-type: none"> – Identify rule from patterns – Continue number sequences – Create own pattern – Explain rule using words and numbers – Apply rule in new examples 	<p>Page 23: Identify pattern rules, continue sequences and describe how patterns change.</p> 
3 Patterns with numbers	Patterns can be described by how numbers change, and understanding the change helps explain and predict patterns.	<ul style="list-style-type: none"> ✓ Continue number patterns ✓ Explain how patterns change ✓ Identify increasing/decreasing patterns ✓ Predict future terms ✓ Use reasoning 	<ul style="list-style-type: none"> – Continue pattern rows – Identify change between terms – Explain pattern growth – Predict missing numbers – Describe reasoning 	<p>Page 24: Continue number patterns, explain rules and describe how patterns change.</p> 
4 Problem solving	Patterns can be described and justified using mathematical reasoning and understanding of number relationships.	<ul style="list-style-type: none"> ✓ Identify missing terms ✓ Explain pattern rule ✓ Justify reasoning ✓ Compare patterns ✓ Recognise multiple pattern types 	<ul style="list-style-type: none"> – Identify missing numbers – Explain reasoning for pattern – Compare patterns – Solve reasoning questions – Use pattern vocabulary 	<p>Page 25: Describe patterns, explain rules and justify reasoning using number relationships.</p> 
5 Checkpoint 1	Previously learned number and pattern skills can be reviewed and applied to show understanding and identify next learning steps.	<ul style="list-style-type: none"> ✓ Recall key number skills ✓ Recognise simple patterns ✓ Apply addition and subtraction ✓ Explain reasoning ✓ Show working clearly 	<ul style="list-style-type: none"> – Complete Checkpoint assessment – Review number and pattern questions – Apply strategies to solve problems – Explain thinking – Identify strengths and areas for support 	<p>Pages 26–27: Review number skills and patterns, demonstrate understanding and apply strategies.</p> 

Unit: Algebra: Equations and relationships: Patterns

Focus: Recognising, continuing, creating and explaining growing patterns and understanding how patterns change using constant addition, subtraction or multiplication.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Growing Patterns	Students understand that patterns can increase or decrease using a constant change.	Identifies whether a pattern grows or shrinks and continues it correctly.
Arithmetic Pattern Rules	Recognises patterns that change by adding or subtracting the same number each time.	States the rule (e.g. 'add 3 each time') and applies it correctly.
Multiplicative Pattern Rules	Understands that some patterns grow by multiplying by a constant.	Identifies multiplication patterns and predicts future terms accurately.
Identifying Pattern Rules	Can determine and explain the rule governing a pattern.	Explains rule clearly using correct mathematical language (add, subtract, multiply, constant).
Continuing and Creating Patterns	Can extend a pattern and create a new pattern using a rule.	Generates correct next terms and creates consistent pattern sequences.
Describing Patterns	Explains how and why a pattern changes.	Uses reasoning such as 'it increases by 5 each step' or 'it doubles each time'.
Recognising Structure	Recognises patterns in number sentences and operations.	Identifies repeating structure and explains relationships between numbers.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation (Formative)	Watch students continue and create number patterns using manipulatives, number lines or written sequences.	Do they apply a consistent rule? Can they explain how the pattern changes?
Oral Check	Ask: 'What is the rule for this pattern?' 'How do you know?' 'Does it add, subtract or multiply?'	Listen for correct use of vocabulary such as rule, pattern, constant, increase, decrease.
Written Work	Review Student Book pp. 22–25.	Check accuracy of continued patterns, correct identification of rules and clear explanations.
Practical Task	Students create their own pattern and explain it to a partner or group.	Are rules consistent? Can students explain how the pattern grows or changes?
Exit Ticket/Quick Quiz	Provide 5 short pattern questions.	Identify students who understand pattern rules vs. those guessing without reasoning.

Quick Quiz / Exit Ticket (5 Questions)

- Continue the pattern:
4, 7, 10, 13, __, __
- What is the rule for the pattern:
5, 10, 15, 20, 25?
- Continue the pattern:
3, 6, 12, 24, __
- Find the missing number:
9, 14, 19, __, 29
- Create your own growing pattern and write the rule.

Teaching as Inquiry: Reflection Notes

Reflection Prompts

- Students confidently identifying and continuing growing patterns:
- Students correctly identifying and explaining pattern rules:
- Students recognising multiplication patterns vs addition patterns:
- Students able to describe how patterns change using reasoning:
- Students needing support to identify the rule consistently:
- Misconceptions noticed (e.g. inconsistent rule, counting instead of identifying change, confusion between add and multiply):
- Vocabulary to revisit (pattern, rule, constant, increase, decrease, multiply, sequence):

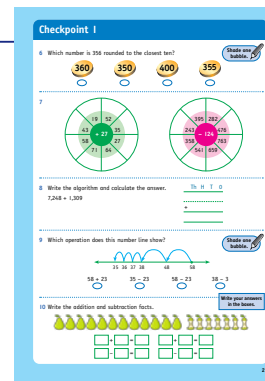
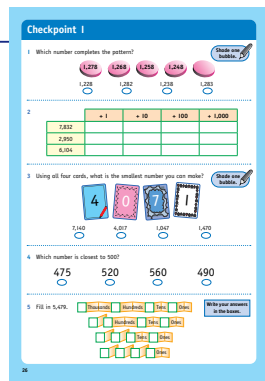
Notes/Next Steps

CHECKPOINT 1 Number and Operations

Purpose

This Checkpoint assesses students' understanding of key mathematical concepts taught across the first two weeks of Year 4. It provides teachers with a clear snapshot of students' number knowledge, place value understanding, rounding, estimation, mental strategies, written addition and related addition/subtraction facts.

The Checkpoint should take approximately **30–40 minutes** and may be completed in **one or two sittings**.



Assessment Overview

Area	Focus	Curriculum Links	Key Skills Assessed
Number & Place Value	Patterns, sequencing, place value	Number Structures	Recognising patterns, identifying missing numbers, understanding place value
Rounding & Estimation	Closest numbers and rounding	Number Structures	Identifying nearest values, rounding to the nearest ten, using benchmark numbers
Operations	Addition and subtraction	Operations	Adding 1, 10, 100 and 1,000; using mental strategies; written addition
Number Lines	Addition and subtraction on a number line	Operations	Interpreting jumps, identifying the operation shown
Number Relationships	Addition and subtraction facts	Number Relationships	Connecting visual models to related addition and subtraction equations

Checkpoint 1 Structure

Part	Focus	Questions	Skills Tested
1	Number Patterns	Identify missing number in pattern	Recognising patterns and sequencing
2	Place Value	Add 1, 10, 100 and 1,000	Understanding base-10 place-value changes
3	Forming Numbers	Use four-digit cards to make the smallest number	Understanding place value and zero as a placeholder
4	Rounding/Closest Number	Identify number closest to 500	Comparing numbers using benchmark reasoning
5	Numeral Expanders	Complete numeral expander for 5,479	Representing thousands, hundreds, tens and ones
6	Rounding	Round 356 to the closest ten	Applying rounding rules
7	Mental Operations	Complete +27 and -124 operation wheels	Applying mental addition and subtraction strategies
8	Written Addition	Solve multi-digit addition	Applying written addition algorithm
9	Number Line Operations	Identify operation shown on number line	Connecting number-line jumps to subtraction
10	Addition and Subtraction Facts	Write related facts from visual model	Connecting part-part-whole model to equations

CHECKPOINT 1 Student Recording Sheet & Marking Rubric

Unit: Number, Place Value, Rounding and Operations • Weeks: 1–2 Year 4 Mathematics Total Marks: 30

Student Name: _____

Date: _____

Marking Sheet

Part	Task	Max Marks	Student Score	Notes / Observations
1	Complete number pattern	2	/ 2	
2	Add 1, 10, 100 and 1,000	4	/ 4	
3	Make smallest four-digit number	2	/ 2	
4	Identify number closest to 500	2	/ 2	
5	Complete numeral expander	4	/ 4	
6	Round to closest ten	2	/ 2	
7	Complete operation wheels	5	/ 5	
8	Solve written addition	4	/ 4	
9	Identify number-line operation	2	/ 2	
10	Write addition and subtraction facts	3	/ 3	
TOTAL:		30	/ 30	

Achievement Rubric

Score Range	Level	Interpretation	Suggested Follow-Up
26–30	Secure	Strong understanding of number, place value, rounding and operations.	Ready to extend into multi-step problems, flexible strategies and larger numbers.
18–25	Developing	Core skills evident but some errors present.	Reinforce place value, rounding, numeral expanders and written addition.
10–17	Emerging	Partial understanding with gaps in key areas.	Provide small-group support in place value, rounding and operations.
Below 10	At Risk	Significant foundational gaps.	Provide targeted intervention in number sense, base-10 structure and operations.

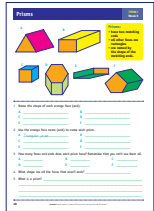
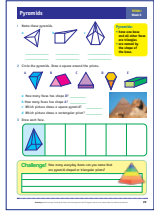
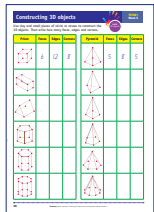
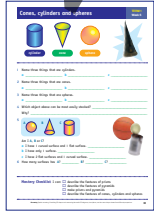
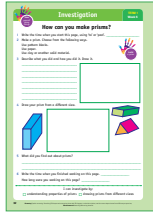
Diagnostic Notes (Teacher Use)

Skill Area	Observations	Follow-Up Plan
Number Patterns		
Place Value		
Rounding and Closest Numbers		
Numeral Expanders		
Addition & Subtraction		
Written Addition		
Number Line Operations		
Addition/Subtraction Facts		
Problem Solving		

If students struggled with:

- **patterns** → Revisit skip counting forwards and backwards by 10.
- **place value** → Use base-10 materials, place-value charts and partitioning practice.
- **rounding** → Use number lines and midpoint language to show nearest ten.
- **numeral expanders** → Revisit thousands, hundreds, tens and ones using expanders and expanded form.
- **addition/subtraction** → Reinforce partitioning strategies such as +20 then +7, or -100, -20, -4.
- **written addition** → Practise aligning digits in Th, H, T, O columns.
- **number lines** → Revisit counting jumps, not landing points.
- **addition/subtraction facts** → Use part-part-whole diagrams and visual models.

Term 1, Week 6 Overview Geometry Spatial Reasoning – Visualising 3D Shapes and Connecting Them with 2D Diagrams

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Prisms	Prisms have two matching ends and all other faces are rectangles.	<ul style="list-style-type: none"> ✓ Identify the matching ends of a prism ✓ Name the shape of the orange face ✓ Use the orange face name to name the prism ✓ Count faces and ends ✓ Describe what a prism is 	<ul style="list-style-type: none"> – Identify matching ends on prisms – Name prisms using the shape of the end – Count faces and ends – Sort and name prism diagrams 	<p>Page 28: Name orange faces, name each prism, count faces and ends and describe what a prism is.</p> 
2 Pyramids	Pyramids have one base and all other faces are triangles.	<ul style="list-style-type: none"> ✓ Identify the base of a pyramid ✓ Name a pyramid using the shape of its base ✓ Tell the difference between a pyramid and a prism ✓ Describe the faces of a pyramid 	<ul style="list-style-type: none"> – Identify the base and triangle faces – Name pyramids from the base – Compare pyramids and prisms – Sort pyramids and prisms 	<p>Page 29: Name pyramids, circle pyramids, draw around prisms, identify square pyramids and rectangular prisms and draw faces.</p> 
3 Constructing 3D objects	3D objects have faces, edges and corners.	<ul style="list-style-type: none"> ✓ Construct a prism or pyramid ✓ Identify faces, edges and corners ✓ Count faces, edges and corners ✓ Record the features of a 3D object 	<ul style="list-style-type: none"> – Identify faces, edges and corners – Construct 3D objects using clay and sticks or straws – Count and record features – Compare prisms and pyramids 	<p>Page 30: Construct 3D objects and record the number of faces, edges and corners.</p> 
4 Cones, cylinders and spheres	Cones, cylinders and spheres have different surfaces and can be found in everyday objects.	<ul style="list-style-type: none"> ✓ Identify a cone, cylinder and sphere ✓ Name everyday objects that match these shapes ✓ Describe flat and curved surfaces ✓ Compare cones, cylinders and spheres 	<ul style="list-style-type: none"> – Identify cones, cylinders and spheres – Sort everyday objects – Describe flat and curved surfaces – Compare which objects roll or stack 	<p>Page 31: Name everyday cylinders, cones and spheres, describe surfaces, identify stackable objects and complete the mastery checklist.</p> 
5 Investigation: How can you make prisms?	Prisms can be made, described and drawn from different views.	<ul style="list-style-type: none"> ✓ Make a prism ✓ Describe how the prism was made ✓ Draw the prism ✓ Draw the prism from a different view ✓ Record start and finish times 	<ul style="list-style-type: none"> – Make a prism using pattern blocks, paper, clay or another material – Describe what was made and how – Draw the prism – Draw it from a different view – Record working time 	<p>Page 32: Make a prism, describe the process, draw the prism from different views and record time spent working.</p> 

Unit: Geometry Spatial Reasoning – Visualising 3D Shapes and Connecting Them with 2D Diagrams

Focus: Identifying, naming, constructing and describing 3D shapes using their features, including faces, edges, corners, bases, matching ends, flat surfaces and curved surfaces.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Prisms	Students understand that prisms have two matching ends and all other faces are rectangles.	Correctly identifies matching ends and names prisms using the shape of the end.
Pyramids	Students understand that pyramids have one base and all other faces are triangles.	Correctly identifies the base and names pyramids using the shape of the base.
Faces, Edges and Corners	Students can identify and count faces, edges and corners on 3D objects.	Accurately counts and records faces, edges and corners, including parts not easily seen in diagrams.
Cones, Cylinders and Spheres	Students can identify and describe cones, cylinders and spheres using surfaces.	Describes flat and curved surfaces and connects shapes with everyday objects.
Comparing 3D Objects	Students can compare prisms, pyramids, cones, cylinders and spheres by their features.	Explains similarities and differences using correct shape language.
Drawing and Constructing	Students can construct 3D objects and draw them from different views.	Builds a prism or pyramid and draws the same object from more than one view.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation Formative	Watch students sort prisms, pyramids, cones, cylinders and spheres.	Can they name each shape and explain using features?
Oral Check	Ask: 'How do you know this is a prism?' or 'How do you know this is a pyramid?'	Listen for use of terms such as matching ends, base, faces, rectangles and triangles.
Written Work	Review Student Book Pages 28–32.	Check accurate naming, counting of features, descriptions and drawings from different views.
Practical Task	Have students construct a prism or pyramid using clay and sticks or straws.	Can they build the object and identify faces, edges and corners?
Exit Ticket/Quick Quiz	Provide 5 short questions about 3D shapes.	Identify students confident with shape features and those needing further modelling.

Quick Quiz / Exit Ticket (5 Questions)

1. What does every prism have?
2. What does every pyramid have?
3. What shape are the other faces of a pyramid?
4. Which shape has two flat surfaces and one curved surface?
5. How do you know a sphere is different from a cone?

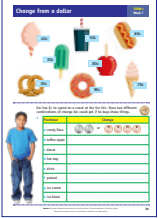
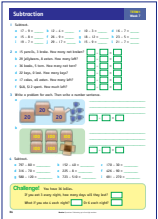
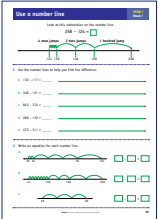

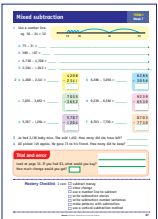
Teaching as Inquiry: Reflection Notes

Reflection Prompts

- Students confidently identifying prisms:
- Students able to name pyramids from the base:
- Students accurately counting faces, edges and corners:
- Students describing cones, cylinders and spheres using surfaces:
- Students connecting 3D objects with 2D diagrams:
- Students drawing prisms from different views:
- Misconceptions noticed, such as confusing prisms and pyramids:
- Vocabulary to revisit: prism, pyramid, base, face, edge, corner, surface, flat, curved:
- Adjustments for future lessons, such as more hands-on construction or sorting:

Notes/Next Steps

Term 1, Week 7 Overview Number: Operations, Financial mathematics – Subtracting up to Four-Digit Numbers and Calculating Change

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Change from a dollar	Change is the amount of money left after something is bought.	<ul style="list-style-type: none"> ✓ Identify the price of an item ✓ Subtract from \$1 to find change ✓ Show change using coins ✓ Make the same amount of change in different ways 	<ul style="list-style-type: none"> – Identify snack prices – Subtract prices from 100 cents – Represent change using coins – Show change in two different ways – Check by adding price and change to \$1 	<p>Page 33: Find change from \$1 and show two different coin combinations for each purchase.</p> 
2 Subtraction	Subtraction can be used to find how many are left or how many are not included.	<ul style="list-style-type: none"> ✓ Subtract numbers accurately ✓ Write a subtraction number sentence ✓ Solve 'how many left?' problems ✓ Subtract up to four-digit numbers 	<ul style="list-style-type: none"> – Practise subtraction facts – Write number sentences from word problems – Solve 'how many left?' questions – Subtract larger numbers – Solve a challenge problem 	<p>Page 34: Complete subtraction facts, write number sentences, solve word problems and subtract up to four-digit numbers.</p> 
3 Use a number line	A number line can be used to subtract by making jumps back in hundreds, tens and ones.	<ul style="list-style-type: none"> ✓ Use a number line to subtract ✓ Make jumps back in hundreds, tens and ones ✓ Find the difference ✓ Write an equation to match a number line 	<ul style="list-style-type: none"> – Model jumps on a number line – Subtract using hundreds, tens and ones jumps – Find the difference – Write equations from number line diagrams 	<p>Page 35: Use number lines to subtract and write equations to match number line representations.</p> 
4 Subtraction facts	Subtraction facts can help solve related subtraction problems with larger numbers.	<ul style="list-style-type: none"> ✓ Use a subtraction fact to solve related facts ✓ See patterns in ones, tens, hundreds and thousands ✓ Use one addition fact to write related equations ✓ Write a subtraction story problem 	<ul style="list-style-type: none"> – Explore related subtraction facts – Identify patterns in tens, hundreds and thousands – Write four related facts from one addition fact – Write and check subtraction stories 	<p>Page 36: Complete subtraction fact patterns, write related equations, write story problems and solve a reasoning challenge.</p> 
5 Mixed subtraction	Different subtraction strategies can be used to solve subtraction problems.	<ul style="list-style-type: none"> ✓ Use a number line to subtract ✓ Use a vertical method ✓ Solve subtraction stories ✓ Find change ✓ Choose a suitable strategy 	<ul style="list-style-type: none"> – Use number lines for subtraction – Solve vertical subtraction problems – Solve subtraction stories – Calculate change from \$3 – Complete mastery checklist 	<p>Page 37: Use number lines, vertical subtraction, subtraction stories and money change problems.</p> 

Unit: Number Operations/Financial Mathematics – Subtracting up to Four-Digit Numbers and Calculating Change

Focus: Using subtraction strategies to solve number and money problems, including calculating change, using number lines, applying related facts, writing subtraction number sentences and solving subtraction stories.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Change from Money	Students understand that change is the amount left after a purchase.	Subtracts the cost from \$1 or \$3 and represents change accurately using coins.
Subtraction Facts	Students can recall and apply basic subtraction facts.	Solves subtraction facts accurately and uses known facts to solve related facts.
Subtraction Stories	Students understand subtraction as taking away or finding how many are left.	Identifies the starting amount, amount taken away and amount left.
Number Lines	Students can use a number line to subtract by jumping back.	Starts at the correct number, makes accurate jumps and records the difference.
Vertical Subtraction	Students can line up numbers by place value and subtract accurately.	Aligns digits correctly and regroupes when needed.
Related Facts and Patterns	Students can use number patterns and fact families to connect addition and subtraction.	Writes related addition and subtraction equations and explains the pattern.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation Formative	Watch students solve subtraction using number lines or vertical methods.	Do they choose a suitable strategy and follow the steps accurately?
Oral Check	Ask: 'How do you know this is subtraction?' or 'How can you check your answer?'	Listen for language such as subtract, difference, left, change, number line and equation.
Written Work	Review Student Book pp.33–37.	Check accuracy with change, subtraction facts, number lines, vertical subtraction and story problems.
Practical Task	Give students a small money problem using \$1 or \$3.	Can they calculate change and show it using coins?
Exit Ticket/Quick Quiz	Provide 5 short subtraction questions.	Identify students confident with subtraction strategies and those needing support.

Quick Quiz / Exit Ticket (5 Questions)

- You have \$1. You spend 40c. How much change do you get?
- What is $75 - 31$?
- Use a related fact: if $9 - 4 = 5$, what is $900 - 400$?
- Write a number sentence: 'Jo had 149 apples. She gave away 73. How many did she keep?'
- What strategy would you use to solve $4,208 - 2,341$?

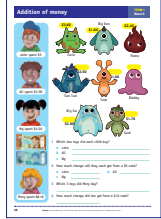
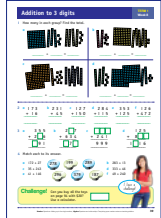
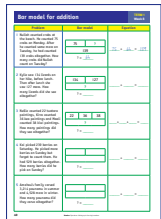
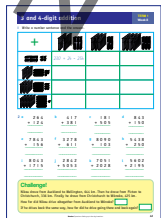
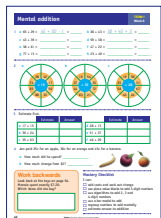
Teaching as Inquiry: Reflection Notes

Reflection Prompts

- Students confidently calculating change from \$1 or \$3: _____
- Students accurately solving subtraction facts: _____
- Students using number lines to subtract: _____
- Students lining up digits correctly in vertical subtraction: _____
- Students using related facts and patterns: _____
- Students solving subtraction stories: _____
- Students checking answers using addition or estimation: _____
- Misconceptions noticed, such as subtracting from the wrong number or misaligning digits: _____
- Vocabulary to revisit: subtract, difference, change, left, number line, equation, vertical method: _____
- Adjustments for future lessons, such as more number line modelling or regrouping practice: _____

Notes/Next Steps

Term 1, Week 8 Overview Number: Operations, Financial mathematics – Adding up to Four-Digit Numbers and Calculating Total Cost

Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Addition of money	Money amounts can be added to find a total cost and subtracted to find change.	<ul style="list-style-type: none"> ✓ Identify toy prices ✓ Add two or more money amounts ✓ Find toys that match a total amount ✓ Calculate change from \$5 or \$10 	<ul style="list-style-type: none"> – Add toy prices – Match toy combinations to amounts spent – Calculate change from a note – Check totals and change 	Page 38: Add toy prices, identify what each child bought and calculate change from \$5 or \$10. 
2 Addition to 3 digits	Two- and three-digit numbers can be added by using place value.	<ul style="list-style-type: none"> ✓ Add two- and three-digit numbers ✓ Use hundreds, tens and ones ✓ Use vertical addition ✓ Complete missing-number equations ✓ Match equations to answers 	<ul style="list-style-type: none"> – Add base-10 representations – Use vertical addition – Complete missing-number equations – Match addition equations to totals 	Page 39: Add base-10 representations, solve vertical addition, complete missing numbers and match answers. 
3 Bar model for addition	A bar model can show the parts and total in an addition problem.	<ul style="list-style-type: none"> ✓ Identify the parts ✓ Identify the total ✓ Use a bar model ✓ Write an equation ✓ Find the missing number 	<ul style="list-style-type: none"> – Read addition story problems – Identify parts and totals – Complete bar models – Write matching equations – Solve missing-number problems 	Page 40: Complete bar models, write equations and solve addition problems in context. 
4 3- and 4-digit addition	Three- and four-digit numbers can be added using place value.	<ul style="list-style-type: none"> ✓ Add three- and four-digit numbers ✓ Write a number sentence ✓ Use place value ✓ Use vertical addition ✓ Solve an addition word problem 	<ul style="list-style-type: none"> – Write number sentences from base-10 pictures – Add using vertical method – Line up digits by place value – Solve a distance word problem 	Page 41: Write number sentences, add three- and four-digit numbers and solve the journey challenge. 
5 Mental addition	Mental strategies can be used to add numbers efficiently.	<ul style="list-style-type: none"> ✓ Use mental strategies ✓ Regroup numbers ✓ Use place value ✓ Estimate first ✓ Solve money addition problems 	<ul style="list-style-type: none"> – Use tidy-number strategies – Split numbers into tens and ones – Add with target circles – Estimate before solving – Solve money total and change problems 	Page 42: Use mental strategies, estimate answers, solve money problems and complete the mastery checklist. 

Unit: Number: Operations, Financial mathematics; Algebra: Equations and relationships – Adding up to Four-Digit Numbers and Calculating Total Cost

Focus: Using addition strategies to solve number and money problems, including adding money amounts, using place value, completing bar models, writing equations, estimating and solving problems involving totals and change.

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Addition of Money	Students understand that money amounts can be added to find a total cost.	Adds prices accurately and calculates change from \$5 or \$10.
Place Value Addition	Students use hundreds, tens, ones and thousands to add numbers.	Correctly adds two-, three- and four-digit numbers using place value.
Vertical Addition	Students can line up digits by place value and add accurately.	Aligns ones, tens, hundreds and thousands correctly and regroupes when needed.
Bar Models	Students understand that a bar model shows parts and total.	Labels parts and total correctly and writes a matching equation.
Mental Addition	Students use mental strategies to add efficiently.	Uses strategies such as making tidy numbers, splitting into tens and ones and regrouping.
Estimation	Students estimate before solving to check if an answer is reasonable.	Gives a sensible estimate and compares it with the exact answer.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation Formative	Watch students solve addition problems using materials, bar models or vertical method.	Do they choose a suitable strategy and explain their thinking?
Oral Check	Ask: 'What are the parts and total?' or 'How did you add this mentally?'	Listen for language such as add, total, parts, equation, estimate, dollars and cents.
Written Work	Review Student Book pp.38–42.	Check accuracy with money totals, bar models, vertical addition, mental strategies and estimation.
Practical Task	Give students toy prices and ask them to find a total and change.	Can they add prices accurately and subtract from a note to find change?
Exit Ticket/ Quick Quiz	Provide 5 short addition questions.	Identify students confident with addition strategies and those needing support.

Quick Quiz / Exit Ticket (5 Questions)

1. What is $\$3.50 + \1.20 ?
2. What is $173 + 16$?
3. In a bar model, what does the long bar show?
4. What is $644 + 336 + 425$?
5. Estimate first, then solve:
 $39 + 24$.

Teaching as Inquiry: Reflection Notes


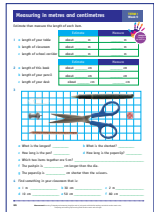
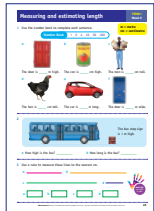
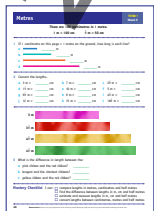

Reflection Prompts

- Students confidently adding money amounts:
- Students calculating change from \$5 or \$10:
- Students using place value to add two-, three- and four-digit numbers:
- Students lining up digits correctly in vertical addition:
- Students identifying parts and totals in bar models:
- Students writing equations to match problems or models:
- Students using mental addition strategies:
- Students estimating before solving:
- Misconceptions noticed, such as misaligning digits or confusing parts and totals:
- Vocabulary to revisit: add, total, part, equation, estimate, regroup, dollars, cents, change:
- Adjustments for future lessons, such as more place value modelling or mental strategy sharing:

Notes/Next Steps

Term 1, Week 9 Overview

Measurement – Estimating, Measuring and Comparing Length

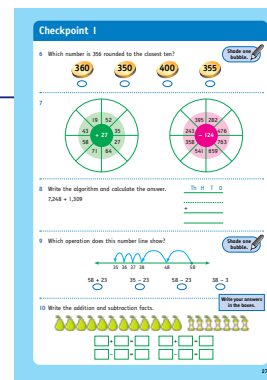
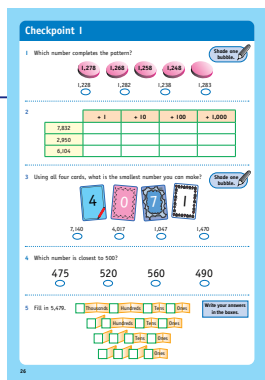
Lesson & Topic	Learning Intention	Success Criteria	Main Activities	Student Book Practice
1 Metres	Metres can be used to measure and compare height.	<ul style="list-style-type: none"> ✓ Read heights in metres ✓ Compare heights using taller and shorter ✓ Find the difference between heights ✓ Order objects from shortest to tallest 	<ul style="list-style-type: none"> – Read a metre scale – Compare animal heights – Find height differences – Solve combined height problems – Order animals by height 	<p>Page 43: Read heights in metres, compare animals, find differences and order from shortest to tallest.</p> 
2 Measuring in metres and centimetres	Metres and centimetres can be used to estimate, measure and compare length.	<ul style="list-style-type: none"> ✓ Estimate length in metres and centimetres ✓ Measure length using metres and centimetres ✓ Compare lengths ✓ Identify longest and shortest objects 	<ul style="list-style-type: none"> – Choose metres or centimetres – Estimate then measure classroom objects – Compare object lengths on a grid – Find classroom objects that match given lengths 	<p>Page 44: Estimate and measure in metres and centimetres, compare object lengths and complete a measurement hunt.</p> 
3 Measuring and estimating length	Metres and centimetres are used to estimate and measure length.	<ul style="list-style-type: none"> ✓ Choose metres or centimetres ✓ Estimate a sensible length ✓ Measure to the nearest centimetre ✓ Compare lengths using metres and centimetres 	<ul style="list-style-type: none"> – Use a number bank to choose sensible measurements – Estimate using known measurements – Measure lines to the nearest centimetre – Compare lengths and units 	<p>Page 45: Complete measurement sentences, estimate bus length and height and measure lines to the nearest centimetre.</p> 
4 Metres	Metres can be converted into centimetres.	<ul style="list-style-type: none"> ✓ Explain that 1 m = 100 cm ✓ Explain that ½ m = 50 cm ✓ Convert metres to centimetres ✓ Compare lengths ✓ Find the difference between lengths 	<ul style="list-style-type: none"> – Convert metres to centimetres – Convert half metres – Compare ribbon lengths – Find differences between lengths – Complete mastery checklist 	<p>Page 46: Convert metres and half metres to centimetres, compare ribbon lengths and find differences.</p> 
5 Investigation: Inenga roa	Familiar objects or body parts can be used as benchmarks to estimate length.	<ul style="list-style-type: none"> ✓ Measure matikara and kōiti ✓ Use matikara and kōiti to estimate length ✓ Estimate in centimetres ✓ Measure with a ruler ✓ Compare estimate with actual measurement 	<ul style="list-style-type: none"> – Measure matikara and kōiti – Estimate desk measurements using body-part benchmarks – Measure with a ruler – Tick estimates within 2 cm – Decide which benchmark was more accurate 	<p>Page 47: Investigate estimating length using matikara and kōiti, measure with a ruler and compare accuracy.</p> 

CHECKPOINT 2 Place Value, Addition, Subtraction, 3D Shapes, Money and Measurement

Purpose

This Checkpoint assesses students' understanding of the key mathematical concepts taught across the second block of learning. It gives teachers a clear snapshot of students' knowledge, skills and fluency in place value, number operations, equations and relationships, 3D shapes, money and measurement.

The Checkpoint should take approximately **30–40 minutes** and can be completed in **two sittings**.



Assessment Overview

Area	Focus	Curriculum Links	Key Skills Assessed
Place Value	Reading, writing, ordering and comparing numbers	Number Structures	Ordering numbers, identifying place value, writing numbers in words, rounding
Addition	Addition facts, vertical addition, missing numbers and bar models	Number Operations/Equations and Relationships	Doubling, making 100, completing equations, adding 3- and 4-digit numbers
Subtraction	Subtraction facts, number lines, vertical subtraction and word problems	Number Operations	Using number lines, related facts, vertical subtraction, finding difference
Geometry	Prisms, pyramids, faces, surfaces and 3D objects	Geometry/Spatial Reasoning	Naming 3D objects, describing faces, identifying curved and flat surfaces
Money	Coins, totals and change	Financial Mathematics	Representing money, calculating totals, finding change
Measurement	Metres, centimetres and sensible estimates	Measurement/Measuring	Choosing sensible units, estimating and comparing lengths

Checkpoint 2 Structure

Part	Focus	Questions	Skills Tested
1	Ordering numbers	Q1	Order 4-digit numbers from smallest to largest
2	Place value	Q2–3, Q8	Identify digit values and write numbers with specified digits
3	Number words and rounding	Q4–6	Write numbers in words; round to nearest hundred and thousand
4	Comparing numbers	Q7	Use 'less than' and 'more than' correctly
5	Addition facts and equations	Q9–13, Q29	Doubles, make 100, missing numbers, vertical addition and bar model
6	Subtraction patterns and number lines	Q14–16, Q23–26	Complete subtraction patterns, subtract using number lines, write facts, solve vertical subtraction
7	Growing and shrinking patterns	Q17	Continue patterns and state rules
8	3D shapes	Q18–20	Name prisms and pyramids, count faces, identify curved surface and triangular faces
9	Money	Q21–22, Q27	Make amounts with coins, add/subtract money, calculate spending and change
10	Measurement	Q30	Choose sensible measurements in metres and centimetres

CHECKPOINT 2 Student Recording Sheet & Marking Rubric

Unit: Place Value, Addition, Subtraction, 3D Shapes, Money and Measurement

Weeks: 6–9 Year 4 Mathematics

Total Marks: 60

Student Name:

Date:

Marking Sheet

Part	Task	Max Marks	Student Score	Notes / Observations
1. Ordering numbers	Order six 4-digit numbers from smallest to largest	1	/ 1	
2. Place value	Identify values of underlined digits; create numbers using given digits; rename 7,426	8	/ 8	
3. Number words and rounding	Write 3 numbers in words; round to nearest hundred and thousand	5	/ 5	
4. Comparing numbers	Write 'less than' or 'more than'	4	/ 4	
5. Addition facts and equations	Doubles, make 100, missing boxes, vertical addition and bar model	12	/ 12	
6. Subtraction	Number lines, related facts, word problems and vertical subtraction	10	/ 10	
7. Patterns	Complete shrinking, growing patterns and state the rule	3	/ 3	
8. 3D shapes	Name 3D objects, count faces, identify surfaces and features	6	/ 6	
9. Money	Make coin amounts, complete money tables, calculate spend and change	8	/ 8	
10. Measurement	Choose sensible measurements in metres or centimetres	3	/ 3	
TOTAL		60	/ 60	

Achievement Rubric

Score Range	Level	Interpretation	Suggested Follow-Up
52–60	Secure	Strong understanding across place value, operations, geometry, money and measurement.	Extend with multi-step problems, mixed strategies, larger numbers and reasoning tasks.
40–51	Developing	Most skills are developing well, with some gaps or inconsistent accuracy.	Target specific gaps such as regrouping, number lines, place value or measurement conversions.
25–39	Emerging	Partial understanding; student needs support across several areas.	Provide small-group teaching with materials, number lines, place value charts and guided practice.
Below 25	At Risk	Significant gaps in core number, operation and measurement knowledge.	Prioritise intervention on place value, basic facts, addition/subtraction strategies and key vocabulary.

Diagnostic Notes (Teacher Use)

Skill Area	Observations	Follow-Up Plan
Place value and number structure		
Reading, writing and ordering numbers		
Rounding and comparing numbers		
Addition facts and vertical addition		
Bar models and missing-number equations		
Subtraction using number lines		
Vertical subtraction and regrouping		
Patterns and related facts		
3D shapes and features		
Money totals and change		
Measurement in metres and centimetres		

Key Understandings to Assess

Area	Expected Understanding	Evidence to Look For
Place Value	Students understand the value of digits in numbers up to four digits.	Correctly identifies thousands, hundreds, tens and ones; writes and orders numbers accurately.
Number Operations	Students use addition and subtraction strategies to solve problems.	Uses vertical methods, number lines, facts and equations accurately.
Equations and Relationships	Students can complete missing-number equations and use patterns.	Identifies the missing value and explains the pattern or relationship.
Geometry Spatial Reasoning	Students can name and describe 3D objects by their features.	Names prisms and pyramids, counts faces and identifies curved or triangular surfaces.
Financial Mathematics	Students can represent amounts of money and calculate change.	Shows coin combinations, completes money tables and finds spending and change.
Measurement	Students can choose sensible measurements in metres and centimetres.	Selects appropriate units and explains why a measurement is sensible.

Assessment Opportunities

Type	Suggested Activity	What to Observe
Observation	Watch students complete number line and vertical subtraction questions.	Do they choose correct starting numbers, line up digits and regroup when needed?
Oral Check	Ask students to explain one place value, money or measurement answer.	Listen for accurate use of mathematical language.
Written Work	Review Checkpoint 2 pages 48–49.	Check accuracy, strategy use and any repeated misconceptions.
Practical Follow-Up	Use base-10 blocks, coins, 3D shapes and rulers with students who need support.	Can students show the concept with materials before recording?
Quick Conference	Ask: 'Which question was easiest? Which was hardest? Why?'	Identify confidence, strategy choice and areas needing reteaching.

Quick Follow-Up Questions

- How do you know the value of a digit in a number?
- How can you check an addition or subtraction answer?
- What is the difference between a prism and a pyramid?
- How do you calculate change?
- When would you use metres instead of centimetres?

Teaching as Inquiry: Reflection Notes

Reflection Prompts

Notes/Next Steps

- Students confidently using place value: _____
- Students accurately ordering and comparing numbers: _____
- Students rounding to the nearest hundred and thousand: _____
- Students solving addition problems accurately: _____
- Students solving subtraction problems using number lines and vertical methods: _____
- Students completing equations and patterns: _____
- Students identifying and describing 3D shapes: _____
- Students representing money and calculating change: _____
- Students choosing sensible metric measurements: _____
- Misconceptions noticed: _____
- Vocabulary to revisit: place value, total, difference, equation, prism, pyramid, face, surface, metre, centimetre, change: _____
- Adjustments for future lessons: _____