What's New in Mathematics and Statistics 0–8

Te Tāhuhu o te Mātauranga Ministry of Education | Te Poutāhū Curriculum Centre

Changes across 0–8 content and structure

Section	What is staying the same?	What is different?
Purpose statement	Purpose Statement and whakataukī	The purpose statement now includes the enduring big ideas (Understand) and themes that students develop understanding of over the years.
Understand-Know-Do Overview		Following extensive work on knowledge-rich curriculum design, we have updated the Understand, Know, Do structure for all New Zealand Curriculum learning areas. In previous versions of the draft learning areas, the Understand, Know and Do components had been woven together within the Progress Outcomes. In this version, the concepts of understanding, knowledge and practice are strengthened, while the terms Understand, Know and Do are no longer explicitly referred to in the curriculum.
Learning area structure	Unpacking of the six strands: Number, Algebra, Measurement, Geometry, Statistics and Probability	The learning area continues to be organised into six strands. What were previously known as sub-strands are termed elements.
Introduction	This is a new section	This section tells the story of how the Mathematics and Statistics Learning Area develops over Years 0–10. It provides a brief overview that captures the intent of the learning area and how teaching content changes over time. This supports teachers to situate the teaching sequence statements within a broader context.
Teaching Guidance		The overall teaching guidance for the learning area has been moved to a supporting document to be consistent with all other learning areas. The following content has been removed and will now sit across the whole curriculum: ○ *Explicit Teaching* ○ *Inclusive Teaching and Learning* (renamed *Creating responsive learning environments*) ○ *Using assessment to inform teaching* ○ *Planning*

Section	What is staying the same?	What is different?
Teaching Sequence	"Teach students to…" statements have been retained (now called 'Practice statements'), although some have been revised to ensure clearer progression and consistency.	The knowledge (Know) and practices (Do) for each learning area are now clearly laid out in the year-by-year teaching sequences. These teaching sequences have been organised to present and revisit knowledge and practices in ways that develop and deepen student understanding. The teaching considerations will now be in supporting resources; removing these has enabled the size of the Mathematics and Statistics Learning Area to be reduced while making essential content more prominent. Some key aspects of the teaching considerations are now found within the knowledge and practices.
Content structure	The learning area continues to be organised into six strands with most strands being broken further into elements. The language of Mathematics and Statistics section for each year remains.	Changes to the Statistics and Probability strands have been made. Statistics and probability are written with a different focus as the statistical enquiry cycle is no longer used as the main structure for the strands. In most year groups, you will see a reduction in the amount to teach for these strands; the probability strand now begins at year 5. The Algorithmic Thinking element has been removed from the Algebra strand as this now sits within the Technology learning area. Other key changes for each year level are listed below.

Key content changes at each year level

Key changes: Years 0–3

First 6 months	Year 1	Year 2	Year 3
• Greater specificity regarding the number range - changed to 'up to 20' • Name the number before or after • Addition and subtraction facts to 5	• Greater specificity regarding the number range - changed to 'up to 100' • Counting statements provide increased granularity • Addition and subtraction word problems • Name the number before or after to 20 • Adding ten to a one-digit number • Relationship between halves and quarters • Coin and note recognition	• Numbers up to 120 • Counting in 3s • Identification of odd and even numbers • Recalling addition facts to 20 • Recalling double and halves, 2s, 5s and 10s • Working with thirds • Equivalence between halves and quarters	• Counting in 4s 8s and 100s • Counting in 10s and 100s from any number • Multiplication facts (4s and 8s) • Addition and subtraction word problems • Complement of a number to 100 • Fraction statements have been clarified

Key changes: Years 4–6

Year 4	Year 5	Year 6
• Counting statements connect to multiplication and division facts • Multiplication and division facts • Counting in 10s, 100s and 1000s from any whole number • Multiplying a 3-digit number by a 1-digit number • Estimating angle size • Calculating area	• Numbers up to one million • Counting back through 0 to identify negative numbers • Multiplication and division facts to 12 x 12 • Dividing a 3-digit number by 1 digit number • Knowing some fractional decimal equivalents • Addition and subtracting related fractions	• Using exponents for square and cube numbers • Factors statement clarified • Introduction to thousandths • Multiplication and division by 1000 • Locating points on a coordinate plane • Percentage statements clarified

Key changes: Years 7-8

Year 7	Year 8
• Identifying prime numbers • Two-step linear equations • Drawing nets • Dividing a fraction by a whole number	• Cube roots • Using expanded form • Multiplying two fractions • Area of parallelogram/trapezium • Identifying parts of a circle