

Maths Assessment Guide

Introduction

SMART maths assessments for Years 3–10 assess students' fluency and conceptual knowledge across all six strands of the New Zealand Curriculum Mathematics and Statistics learning area, as well as problem-solving and reasoning in unfamiliar contexts. They provide reliable information on progress and achievement to inform teaching, next learning steps, and twice-yearly reporting to parents and whānau.

Assessments are low-stakes and designed to describe each student's overall mathematical proficiency while identifying strengths, gaps, and next teaching focuses. Items vary in difficulty to measure the full range of performance (emerging to exceeding).

Curriculum Strands Assessed

All six strands are covered:

- Number (including structures, operations, rational numbers, and financial mathematics)
- Algebra (equations and relationships)
- Measurement
- Geometry (shapes and spatial reasoning)
- Statistics (developing knowledge, visualisation, and interpretation of data)
- Probability (from Year 4 onward, progressing to experimental and theoretical)

Assessments draw from the strands and elements appropriate to each year level.

For information on progress markers please visit [Tāhūrangi](#).

Assessment Structure and Timing

Each assessment has two equal sections:

- **Section 1:** Focuses on fluency and conceptual knowledge (simple contexts; no calculator for Years 3–6). Items progress from less to more complex.
- **Section 2:** Focuses on problem-solving and reasoning. This second section is made of testlets; a context (stimuli) and its associated items. Year 7–10 students may use a calculator in this section.

SMART assessments are not timed by the tool, but times are provided as a guide to help teachers prepare for and deliver the assessments.

- **Year 3:** 30 items, approximately 35 minutes
- **Years 4 to 6:** 35 items, approximately 40–45 minutes
- **Years 7 to 8:** 40 items, approximately 45–50 minutes
- **Years 9 and 10:** 45 items, approximately 50 minutes

Linking between year-levels

You may notice that a number of items are included in assessments at two successive year levels (vertical linking) to compare performance and place all students on the same scale. Other items are repeated for the same year group across the two assessment windows to measure progress over the year. All items are designed to be appropriate for students' ages and learning levels.

Delivery Formats

Assessments are available **online** or **paper-based**.

- **Online:** Permitted tools include ruler, protractor (online versions), notepad, and calculator (Years 7–10 in Section 2 only).
- **Paper-based:** Students may use ruler, protractor, compass, and calculator (Years 7–10 in Section 2 only).

Key points for successful Maths Assessments:

1. Preparation

Decide paper or digital format.

If you are intending to use devices, ensure students complete the familiarisation tool (NZ Curriculum) using their usual devices.

For online: Create the Assessment Session Code, and generate and print student codes. Assessment Session codes need to be created prior to the beginning of the assessment, and can be created at any time before the assessment in the five week window.

For paper: Print question papers (reusable where appropriate) and individual answer sheets. These should be stored securely prior to the assessment. Ensure that the appropriate equipment (calculators, protractors, rulers) is available.

Organise accessibility support as needed.

2. Delivering a Math Session

Teachers or administrators will create a dedicated assessment session for Math. Share the session code and individual student codes with students.

Assessments are not timed by SMART, so teachers and schools are able to manage timing and breaks themselves.

For online delivery; consider using the *Pause* function if a break is planned. Teachers can monitor live progress on the session dashboard, then finalise the session once all students have submitted.

For Paper-Based Delivery; distribute question papers and named answer sheets. No session code is required. After completion, scan and upload answer sheets for integration with online results.

3. Post-Assessment

All results (online or scanned paper) appear together in marking and reporting. Some paper answers may be flagged for teacher review, for example where there are stray marks or responses that require clarification. Where needed, these responses may require teacher marking.

Support is available via the Education Service Desk.

Using SMART results to contribute to Reporting to Parents and Whānau:

SMART results provide one piece of evidence to inform teachers' decisions about students' progress and achievement for twice-yearly reporting to parents and whānau.

When used alongside classroom evidence and other assessment information SMART supports consistent and transparent reporting using student progress descriptors: emerging, developing, consolidating, proficient, or exceeding.