SMART

Pāngarau Aromatawai Guide

Introduction

SMART pāngarau assess mokopuna mathematical knowledge, reasoning, and problem solving across the Pāngarau strands, drawing on tau/tātai (number), taurangi (algebra), ine (measurement), āhuahanga (geometry), tauanga (statistics), and tūponotanga (probability). The assessments focus on both the application of mathematical knowledge and the ability to reason and make connections in contexts that may or may not be familiar, requiring mokopuna to interpret information, select appropriate strategies, and justify their thinking.

Assessments are low-stakes and describe each mokopuna's overall pāngarau progress while identifying strengths, gaps, and next teaching focuses. Items vary in difficulty to measure the full range of performance from e maiangi ana to e kairangi ana.

Ngā Whenu There are four whenu that cover six strands:

- Taurangi me te Ahuahanga (Algebra and Geometry) - Equations and relationships, repeating patterns, shapes, positions and locations
- Te Tauanga me te Tūponotanga (Statistics and Probability) - Investigative questions, planning, collecting and analysing data. Chance, visualisation and interpretation of chance
- Te Tātai (Qualification) Structure of whole numbers: groupings, partitioning, and place value, multiplication and division of whole numbers
- Te Ine (Measurement) - Measurement and scales, perimeter, area, and volume

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

Assessment Structure and Timing

Each assessment covers two key areas of Pāngarau:

- Fluency and conceptual knowledge: Items in this section focus on demonstrating accuracy of calculation processes and evidence of conceptual understanding.

- Problem solving and reasoning: Mokopuna engage metacognitive processes as they interpret contexts and determine appropriate solution strategies.

Delivery and Equipment

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

Online: Permitted tools include ruler, protractor (online versions), notepad, and calculator for all questions (Years 4–10).

Paper-based: Mokopuna may use ruler, protractor, compass, and calculator for all questions (Year 4-10).

Links between Year Levels

A proportion of common items are included in assessments at two successive year levels (vertical linking) to compare performance and place all mokopuna on the same scale. Some items are also repeated for the same year group across the two assessment windows to measure progress over the year. Contexts and items remain age-appropriate.

Key points for successful Pāngarau Assessments:

1. Preparation

Decide paper or digital format.

If you are intending to use devices, ensure mokopuna complete the familiarisation tool (Te Marautanga pathway) using their usual devices.

For online: Create the Assessment Session Code, and generate and print mokopuna 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 Pāngarau Session

Kaiako or administrators will create a dedicated assessment session for Pāngarau. Share the session code and individual mokopuna codes with mokopuna.

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

For online delivery; consider using the *Pause* function if a break is planned. Kaiako can monitor live progress on the session dashboard, then finalise the session once all mokopuna 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. Flagged paper answers will require teacher review and possibly 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 kaiako' decisions about mokopuna' progress and achievement for twice-yearly reporting to parents and whānau.

Using the SMART writing score alongside other information enables informed decisions when reporting with mokopuna progress descriptors: e maiangi ana, e whanake haere ana, e ū haere ana, e mātau ana, e kairangi ana.