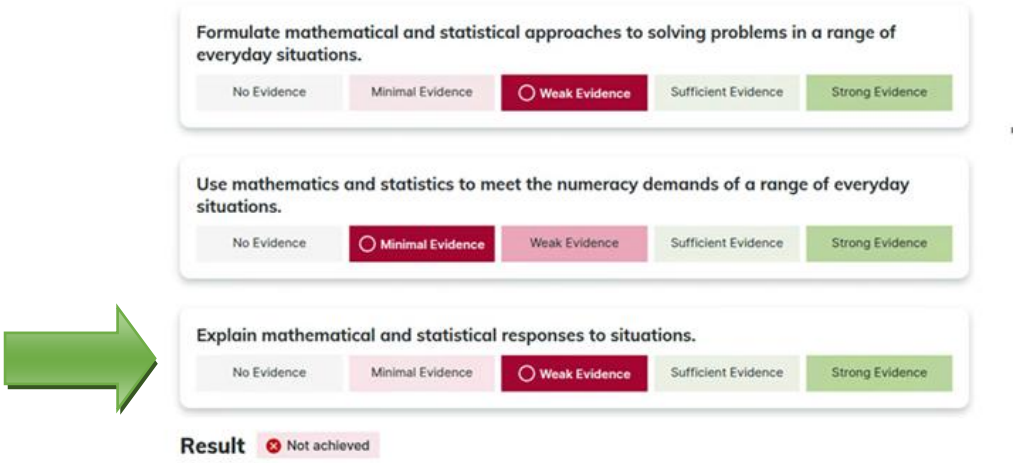
Te Tāhuhu o te Mātauranga
Ministry of Education

Te Poutāhū
Curriculum Centre

# Unpacking Co-requisite Outcomes: Numeracy Outcome 3

Numeracy: 32406, Apply mathematics and statistics in a range of everyday situations




**Numeracy Outcome 3:**

Learners explain the reasonableness of mathematical and statistical responses to situations.

This means that learners:

- consider and explain the reasonableness of solutions, outcomes, and approaches while reflecting on how these were chosen.
- engage in sense-making to interpret solutions in relation to the situation given, including in different cultural contexts (see “Unpacking Numeracy”).
- provide evidence-based conclusions.
- use critical judgements in relation to statements based on mathematical and statistical ideas.
- share mathematical and statistical ideas.

Taken from Numeracy Learning Matrix

This resource should be read in conjunction with:

- US32406 - Apply mathematics and statistics in a range of everyday situations
- Unpacking Numeracy
- NCEA Co-Requisite Learning Outcomes for Numeracy

**Examples of teaching strategies to support learning for Numeracy Outcome 3:**

- Explicitly teach how to evaluate the accuracy or reasonableness of a calculation, or the efficiency of a calculation method.
- Explicitly teach how to determine if a claim about a linear relationship is mathematically correct, or a calculation involving a rate or ratio is consistent with the information given.
- Practice determining the reasonableness of a solution using spatial properties of objects.
  - Using reasonableness to explain answers
- Explicitly teach how to evaluate the accuracy in a problem using systems of location and navigation.
- Practice justifying a solution that uses properties of measurements.
  - NZAMT Numeracy Questions 2023
- Practice interpreting data displays and reason or justify an answer to an investigation question, make a comparative statement between two groups.
  - Figure NZ
- Explicitly teach how to justify claims within a chance-based scenario.

For more numeracy strategies search Numeracy Resource Bank