

Summary of learning goals

- Students explore practical applications of measurement, in particular mass and dimensions.

Australian Curriculum: Mathematics (Year 4)

ACMMG084: Use scaled instruments to measure and compare lengths, masses, capacities and temperatures.

ACMMG290: Compare objects using familiar metric units of area and volume.

Summary of lessons

Who is this sequence for?

- Students should be competent with measuring using centimetres and millimetres.
- They should understand that volume is based on three dimensions and it describes the amount of space taken up by an object.

Lesson 1: Parcel in the Post

Students try to find the most cost-efficient way to package a variety of items to post domestically through Australia Post, using official Australia Post pricing documentation.

Reflection on this sequence

Rationale

Measurement is used all the time to record the different attributes of objects. These measurements can be meaningfully compared only when a standard unit is used. Using a standard, formal unit means that objects can be compared in any place and by anyone.

This sequence focuses on the power of metric units as a way to quantify attributes across Australia. It is important that students are provided with multiple experiences, so they can develop an understanding of the relative size of metric units. Estimation and practical tasks are particularly important in developing this understanding.



reSolve mathematics is purposeful

- This sequence draws on the real context of posting items to emphasise the importance and universal use of standard units for measurement.
- Students are encouraged to consider the measurements of all of an object's attributes and how this may affect postage costs within Australia.



reSolve tasks are inclusive and challenging

- The openness of this task allows access for all students while still maintaining the more challenging components of the task.



reSolve classrooms have a knowledge-building culture

- Students share their thinking and reasoning about different ways to post items. By listening to and making sense of the reasoning of others, they recognise multiple ways to approach and solve the task.