Selecting mathematics

Key skills | Free preview

Learning target: Select relevant mathematics from one or more areas for the questions being investigated.

Choosing relevant mathematics is part of the solution, not a preliminary label. Explain how the variables and the objective determine the methods you use. Develop a model or statistical formulation from the supplied information, check its conditions, and interpret the result in the original context. A numerical answer needs a reasoned connection to the question.

Try the mathematics

Task 1. A cooling record gives temperatures 80,50,35,27.5 °C at times 0,4,8,12 minutes. The room stays at 20 °C. Investigate a shifted exponential model; later, a new reading at 6 minutes is 42 °C. Select a model family and explain which transformed data support the choice.

Continue with the full worksheet

The complete resource has 2 focused task sets and substantive worked solutions. Use an exercise book or print the A4 worksheet. This preview shows the first task without its full solution.

Find this resource: https://resources.aspiretopowerlearning.com.au/vce/skills/aspire-mm-u2-o2-ks-01/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). Mathematical Methods; Unit 2; Outcome 2; Key skills; bullet 1; p. 56.

The learning target is a concise paraphrase. Aspire reference: aspire-mm-u2-o2-ks-01. This is an internal identifier, not an official VCAA code.

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