

Assessment Specifications

Level 2 Physics 2025

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General information

Domain:	Physics
Standards:	91170, 91171, 91173
Assessment method:	Examination
Assessment medium:	Printed paper

<u>Physics subject page</u> <u>National secondary examinations timetable</u>

Information relating to all achievement standards

Candidates should show their reasoning clearly and may use numerical working, words, and / or diagrams.

Mathematical solutions will require candidates to show, mathematically, that two phenomena, concepts, or principles are connected.

The acceleration due to gravity will be given as $g = 9.8 \text{ m s}^{-2}$.

The number of significant figures in any answer should be consistent with the data in the question.

Answers should be given with an appropriate unit. SI units should be used unless it is more appropriate to include a prefix (milli, kilo, and others will be given). Candidates are expected to understand the prefixes micro, milli, centi, kilo, and mega.

Equipment required

Candidates require an <u>approved calculator</u>, a ruler, and a protractor. Any approved scientific or graphing calculators may be used.

Resources or information supplied

Formulae and the value of the physical constants needed for these standards will be provided in a separate resource sheet that will accompany the examination papers.

Special assessment conditions

Refer to the NZQA website for further information:

Aromatawai special assessment conditions

Specific information for individual achievement standards

Standard:	91170
Title:	Demonstrate understanding of waves
Version:	2
Number of credits:	4

Candidates should be able to compare electromagnetic and mechanical waves.

Although diffraction around an obstacle is not mentioned specifically in the standard, diffraction around an object can be considered as diffraction through a slit of infinite width.

91171
Demonstrate understanding of mechanics
2
6
91173
Demonstrate understanding of electricty and electromagnetism
2

Although motors and generators are not mentioned specifically in the standard, there may be resource-based questions using motors and generators as contexts. Knowledge of the functions of the parts of a motor and generator is not required.

Although weight force is not specifically mentioned in the standard, there may be resourcebased questions using F = mg, recognising direction of forces and balanced forces.