

Task 4: Yearly Examination

Due Date: Week 9 -10 examination block

Task Distributed: 11/09/2024

Unit: Modules1-4

Task Type: Examination

Task Weighting: 40%

Outcomes – Students:

- PH11-2** designs and evaluates investigations in order to obtain primary and secondary data and information
- PH11-4** selects and processes appropriate qualitative and quantitative data and information using a range of appropriate media
- PH11-5** analyses and evaluates primary and secondary data and information
- PH11-6** solves scientific problems using primary and secondary data, critical thinking skills and scientific processes
- PH11-8** describes and analyses motion in terms of scalar and vector quantities in two dimensions and make quantitative measurements and calculations for distance, displacement, speed, velocity and acceleration.
- PH11-9** describes and explains events in terms of Newton's Laws of Motion, the law of conservation of momentum and the law of conservation of energy.
- PH11-10** explains and analyses waves and the transfer of energy by sound, light and thermodynamic principles.
- PH11-11** explains and quantitatively analyses electric fields, circuitry and magnetism.

Task Description

Student's knowledge, skills and scientific understanding of how models, theories and laws have been developed and applied in Physics will be assessed in this examination. This will occur within a 2 hour examination.

It will consist of:

- **Section 1:** 20 multiple choice
Students should allow **30 minutes** to complete this section.
- **Sections 2:** 55 marks of short responses (marks indicated per question).
Students should allow **1 and half hours** to complete this section.

All working out must be shown to be awarded full marks.

As this is an examination, you will need to prepare for this task by:

- Make summary notes of each of the modules listed below
 - Module 1 – Kinematics
 - Module 2 – Dynamics
 - Module 3 – Waves and Thermodynamics
 - Module 4 – Electricity and Magnetism

- Practice Calculation Questions
- Seek teacher assistance on unclear work (Google Classroom or in class)
- Ensure all set work is up to date.

NESA Glossary of Key Words

Understand the verb associated with the task. The verb will provide an understanding of the detail needed to successfully answer the question.

- **Describe**
Provide characteristics and features
- **Calculate**
Ascertain/determine from given facts, figures or information
- **Explain**
Relate cause and effect; make the relationships between things evident; provide why and/or how
- **Analyse**
Identify components and the relationship between them; draw out and relate implications

Check the NESA Glossary of Key Words for further guidance <https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/hsc/hsc-student-guide/glossary-keywords>

Details of Submission

The Yearly Examination will occur in the examination block. You will need a pen, pencil, calculator and a ruler.

Teacher Feedback and Student Self-Reflection

- The task will typically be returned to students within 14 of the due date.
- At this time feedback including information on how to improve will be provided through marked feedback and discussion.
- Students can clarify or seek further feedback by speaker with their teacher or the assessment marker.
- You will also receive feedback on your literacy performance based on the criteria in the school's literacy marking rubric. The marks achieved for literacy will account for between 10% – 20% of the maximum task value.

Upon return of the task, students will also be expected to complete a self-reflection. This will be in the form of a Google Form to identify strengths and weaknesses

How does this link to my learning?

- This task will assess the student's Skills Outcomes which have been developed over the topic
- Through this task student's will be able to see areas in their Physics skill set that are strengths and weaknesses.

Assessment Procedures

All students should be fully aware of the School Assessment Procedures for their year group. These were provided at the beginning of the school year and are available off the school website under the Learning Tab for each year group

