Port Moresby International School
Unit & Assessment Outline

Year	2026	Semester	2	Grade	12	Unit Value	
Curriculum		PNG					
Subject Title/s		PHYSICS					
Course Name		PNG PHYSICS					
Unit Name							
Course Code				Unit Code			

Assessment

Week	Topic(s)	Type of Task	Weighting
3	Speed quizzes	Test	25%
4	2025 Trial Part A	Exam	25%
4	2025 Trial Part B	Exam	25%
8	Speed quizzes	Test	25%

Learning outcomes against which the students will be reported

Recall, facts, definitions and scientific principles.
Apply concepts and links knowledge in unfamiliar situations.
Designs, performs, undertakes and report on scientific investigations.
Communicate scientific ideas and information with relevance and logical development

Course Aims/Goals

1. To develop abilities, skills and attitudes that are relevant to the study and practice of Science and applications in everyday life.
2. Provide students with an understanding of scientific principles and concepts.
3. Develop an awareness of the relationship between Science and Society.
4. Prepare students for further studies in Science in Grades 9 and 10

Regulations governing Late Submission of Work, Non-Submission of Work, Attendance, Cheating/Plagiarism & Rights of Appeal may be found in the Grade 11-12 Curriculum Handbooks, or from the POMIS website;

www.pmis.iea.ac.pg

Content Outline

Weeks	Content Outline	Curriculum Links
1-2	Electromagnet, Electric Motor, Electromagnetic induction Faraday and Lenz Laws, Force between two parallel wires, Flemings Left and Right Rules, Force experienced by a charge in a magnetic field.	12.4 Save Buk
3	Generator, Alternating Current, Mutual Induction, Transformer-Step up and Step Down, Power Grid	
4	TRIAL EXAMINATION WEEK	
5-6	Radioactivity – Rutherford experiment, Radioactive particles and waves and their properties, radiation	12.5 Save Buk
7-8	Types of Decay, activity, Half-Life, Decay series, Fission and Fusion, mass Defects, Binding energy	
9-10	Control, critical mass, nuclear power plant, nuclear reactor core	
11-12	Revision – Gr 11 topics Measurements –kinematics, Force and Motion, Electricity Electronics Grade 12 topics-Fluids, Heat, Waves, electromagnetism, radioactivity	
13-14	Grade 12 PNG National Examinations	