

Diploma Programme - Physics

SL/HL Unit	Timeframe	Topic/ Unit Title	Assessment Component	Summative Assessments	Assessment Objectives
SL DP Physics/ Topic 1	6 weeks	1. Measurements and uncertainties: 1.1 – Measurements in physics 1.2 – Uncertainties and errors 1.3 – Vectors and scalars	Paper 1 Multiple-choice questions on core, about half of which are common with HL. • The use of calculators is not permitted. • A physics data booklet is provided. • Paper 2 Short-answer and extended-response questions on core material. • The use of calculators is permitted. • A physics data booklet is provided. and or Paper 3 Section A This paper will have questions on core. Data-based question and several short-answer questions on experimental work. The use of calculators is permitted. • A physics data booklet is provided.	Practical/P1/P2/P3 End-of-Unit/sub-topic summatives	1. Demonstrate knowledge and understanding of: a. facts, concepts and terminology b. methodologies and techniques c. communicating scientific information. 2. Apply: a. facts, concepts and terminology b. methodologies and techniques c. methods of communication. 3. Formulate, analyse and evaluate: a. hypotheses, research questions and predictions b. methodologies and techniques c. primary and secondary data d. scientific explanations. 4. Demonstrate the appropriate research, experimental, and personal skills necessary to carry out insightful and ethical investigations.
SL DP Physics/ Topic 2	9	2. Mechanics: 2.1 – Motion 2.2 – Forces 2.3 – Work, energy and power 2.4 – Momentum and impulse	Paper 1 Multiple-choice questions on core, about half of which are common with HL. • The use of calculators is not permitted. • A physics data booklet is provided. • Paper 2 Short-answer and extended-response questions on core material. • The use of calculators is permitted. • A physics data booklet is provided. and or Paper 3 Section A This paper will have questions on core. Data-based question and several short-answer questions on experimental work. The use of	The questions on paper 1 test assessment objectives 1, 2 and 3. The questions on paper 2 test assessment objectives 1, 2 and 3. Section A: one data-based question and several short-answer questions on experimental work. (Reference Physics Guide 2016 Aims: 1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities 2. acquire a body of knowledge, methods and techniques that characterize science and technology 3. apply and use a body of knowledge, methods and techniques that	1. Demonstrate knowledge and understanding of: a. facts, concepts and terminology b. methodologies and techniques c. communicating scientific information. 2. Apply: a. facts, concepts and terminology b. methodologies and techniques c. methods of communication. 3. Formulate, analyse and evaluate: a. hypotheses, research questions and predictions b. methodologies and techniques c. primary and secondary data d. scientific explanations. 4. Demonstrate the appropriate research,



			calculators is permitted. • A physics data booklet is provided. Paper 3 • Data-based questions	characterize science and technology)	experimental, and personal skills necessary to carry out insightful and ethical investigations.
SL DP Physics/ Topic 3	6	3: Thermal physics 3.1 – Thermal concepts 3.2 – Modelling a gas	Paper 1 Multiple-choice questions on core, about half of which are common with HL. • The use of calculators is not permitted. • A physics data booklet is provided. • Paper 2 Short-answer and extended-response questions on core material. • The use of calculators is permitted. • A physics data booklet is provided. and or Paper 3 Section A This paper will have questions on core. Data-based question and several short-answer questions on experimental work. The use of calculators is permitted. • A physics data booklet is provided. Paper 3 • Data-based questions	The questions on paper 1 test assessment objectives 1, 2 and 3. The questions on paper 2 test assessment objectives 1, 2 and 3. Section A: one data-based question and several short-answer questions on experimental work. (Reference Physics Guide 2016 Aims: 1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities 2. acquire a body of knowledge, methods and techniques that characterize science and technology 3. apply and use a body of knowledge, methods and techniques that characterize science and technology)	1. Demonstrate knowledge and understanding. 2. Apply 3. Formulate, analyse and evaluate. 4. Demonstrate appropriate research, experimental and personal skills
SL DP Physics / Topic 4	6	4: Waves 4.1 – Oscillations 4.2 – Travelling waves 4.3 – Wave characteristics 4.4 – Wave behaviour 4.5 – Standing waves	Paper 1 Multiple-choice questions on core, about half of which are common with HL. • The use of calculators is not permitted. • A physics data booklet is provided. • Paper 2 Short-answer and extended-response questions on core material. • The use of calculators is permitted. • A physics data booklet is provided. and or Paper 3 Section A This paper will have questions on core. Data-based question and	The questions on paper 1 test assessment objectives 1, 2 and 3. The questions on paper 2 test assessment objectives 1, 2 and 3. Section A: one data-based question and several short-answer questions on experimental work. (Reference Physics Guide 2016 Aims: 1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities 2. acquire a body of knowledge, methods and techniques that characterize science and technology	1. Demonstrate knowledge and understanding. 2. Apply 3. Formulate, analyse and evaluate. 4. Demonstrate appropriate research, experimental and personal skills



			several short-answer questions on experimental work. The use of calculators is permitted. • A physics data booklet is provided.	3. apply and use a body of knowledge, methods and techniques that characterize science and technology)	
SL DP Physics / Topic 5	8	5: Electricity and magnetism 5.1 – Electric fields 5.2 – Heating effect of electric currents 5.3 – Electric cells 5.4 – Magnetic effects of electric currents	Paper 1 Multiple-choice questions on core, about half of which are common with HL. • The use of calculators is not permitted. • A physics data booklet is provided. • Paper 2 Short-answer and extended-response questions on core material. • The use of calculators is permitted. • A physics data booklet is provided. and or Paper 3 Section A This paper will have questions on core. Data-based question and several short-answer questions on experimental work. The use of calculators is permitted. • A physics data booklet is provided.	The questions on paper 1 test assessment objectives 1, 2 and 3. The questions on paper 2 test assessment objectives 1, 2 and 3. Section A: one data-based question and several short-answer questions on experimental work. (Reference Physics Guide 2016 Aims: 1. appreciate scientific study and creativity within a global context through stimulating and challenging opportunities 2. acquire a body of knowledge, methods and techniques that characterize science and technology 3. apply and use a body of knowledge, methods and techniques that characterize science and technology)	1. Demonstrate knowledge and understanding. 2. Apply 3. Formulate, analyse and evaluate. 4. Demonstrate appropriate research, experimental and personal skills

Please note: At times areas of the curriculum will change based on the learning needs and interests of the students.

