



## **IB** Physics

- PS 1 Analyze and solve problems involving Realm of Physics, including measurements, estimations, uncertainties, and graphical analysis.
- PS 2 Analyze and solve problems involving Vectors and Scalars.
- PS 3 Analyze and solve problems involving Kinematics, including Linear, Circular, and SHM situations.
- PS 4 Analyze and solve problems involving Dynamics, including Forces, Momentum, and Energy Conservation situations.
- PS 5 Analyze and solve problems involving Oscillations and Waves.
- PS 6 Analyze and solve problems involving Thermal Physics.
- PS 7 Analyze and solve problems involving Atomic and Nuclear Physics.
- PS 8 Analyze and solve problems involving Energy, Power and Climate Change.
- PS 9 Analyze and solve problems involving Sight and Wave Phenomena.
- PS 10 Analyze and solve problems involving Electromagnetic Waves.
- PS 11 Analyze and solve problems involving Electricity and Magnetism.
- PS 12 Analyze and solve problems involving Work, Energy and Power.
- PS 13 Design a valid investigation.
- PS 14 Collect and process experimental data.
- PS 15 Write a valid investigative report.
- PS 16 11-12.RST.1 Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.
- PS 17 11-12.RST.2 Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.
- PS 18 11-12.RST.4 Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics.
- PS 19 11-12.RST.7 Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., quantitative data, video, multimedia) in order to address a question or solve a problem.
- PS 20 11-12.WHST.1 Write arguments focused on discipline-specific content.

a. Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

b. Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline-appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.

c. Use words, phrases, and clauses as well as varied syntax to link the major sections of the text, create cohesion, and clarify the relationships between claim(s) and reasons, between reasons and evidence, and between claim(s) and counterclaims.

d. Establish and maintain a formal style and objective tone while attending to the norms and conventions of the discipline in which they are writing.

- e. Provide a concluding statement or section that follows from or supports the argument presented.
- PS 21 11-12.WHST.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- PS 22 11-12.WHST.8 Gather relevant information from multiple authoritative print and digital sources, using advanced

searches effectively; assess the strengths and limitations of each source in terms of the specific task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and overreliance on any one source and following a standard format for citation.