VCE Physics: Performance descriptors

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| **PHYSICS****SCHOOL-ASSESSED COURSEWORK** |
| **Performance descriptors** |
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| ***Unit 4******Outcome 2******Provide evidence for the nature of light and matter, and analyse the data from experiments that supports this evidence.*** | **DESCRIPTOR: typical performance in each range** |
| **Very low** | **Low** | **Medium** | **High** | **Very high** |
| Very limited discussion of the use of wave and photon models to explain similarities between, and interactions of, light and matter. | Limited discussion of the use of wave and photon models to explain similarities between, and interactions of, light and matter. | Satisfactory discussion of the use of wave and photon models to explain similarities between, and interactions of, light and matter. | Well-developed discussion of the use of wave and photon models to explain similarities between, and interactions of, light and matter. | Integrated and insightful discussion of the use of wave and photon models to explain similarities between, and interactions of, light and matter. |
| Very limited descriptions of the nature of light and matter that include some links between qualitative and quantitative concepts. | Limited explanations of the nature of light and matter that include some links between qualitative and quantitative concepts. | Sound explanations of the nature of light and matter that include relevant links between qualitative and quantitative concepts. | Well-developed explanations of the nature of light and matter that include well-structured links between qualitative and quantitative concepts. | Comprehensive explanations of the nature of light and matter that include highly articulated links between qualitative and quantitative concepts. |
| Very limited collection of relevant data. | Limited collection of relevant data. | Appropriate collection of relevant data. | Purposeful collection of relevant data.  | Highly proficient collection of relevant data.  |
| Very limited analysis and interpretation of relevant experimental results and statement of their significance. | Limited analysis and interpretation of relevant experimental results and statement of their significance. | Sound analysis and interpretation of relevant experimental results and statement of their significance. | Well-developed analysis and interpretation of relevant experimental results and statement of their significance. | Highly proficient analysis and interpretation of relevant experimental results and explanation of their significance. |

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|  | Very limited analysis and application of data from texts, tables, graphs and diagrams to answer questions, to draw conclusions and to recognise experimental errors and limitations. | Limited analysis and application of data from texts, tables, graphs and diagrams to answer questions, to draw valid conclusions and to recognise experimental errors and limitations. | Sound analysis and application of data from texts, tables, graphs and diagrams to answer questions, to draw valid conclusions and to discuss experimental errors and limitations. | Well-considered analysis and application of data from texts, tables, graphs and diagrams to answer questions, to draw valid conclusions and to discuss experimental errors and limitations. | Integrated and insightful analysis and application of complex data from texts, tables, graphs and diagrams to answer questions, to draw valid conclusions and to discuss experimental errors and limitations. |
| Very limited use of physics terminology, units, representations and conventions.  | Some appropriate use of physics terminology, units, representations and conventions.  | Appropriate use of most physics terminology, units, representations and conventions.  | Effective and appropriate use of physics terminology, units, representations and conventions. | Proficient and highly appropriate use of physics terminology, units, representations and conventions.  |

KEY to marking scale based on the outcome contributing 30 marks

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| Very Low 1–6 | Low 7–12 | Medium 13–18 | High 19–24 | Very High 25–30 |