

| Grade | AO1:   | AO2:  | AO3:  |
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| A*    | Demonstrates exceptional performance for the A grade descriptors.  | Demonstrates exceptional performance for the A grade descriptors.   | Demonstrates exceptional performance for the A grade descriptors.   |
| A / B | <p>a) demonstrate detailed knowledge and understanding of most principles, concepts and facts from the specification</p> <p>b) select relevant information from the specification</p> <p>b) show understanding of most principles, concepts and facts from the specification;</p> <p>c) organise and present information clearly in appropriate forms using scientific terminology.</p> <p>d) write equations for most chemical reactions.</p> | <p>a) apply principles and concepts in familiar and new contexts involving several steps in the argument</p> <p>b) describe significant trends and patterns shown by complex data presented in tabular or graphical form; interpret phenomena with few errors; and present arguments and evaluations clearly</p> <p>c) comment critically on statements, conclusions or data</p> <p>d) evaluate critically any statements, conclusions or data</p> <p>e) carry out accurately most of the calculations specified; and apply the principles of statistical analysis when directed</p> <p>f) carry out accurately complex calculations specified</p> <p>g) carry out extended calculations, with little or no guidance, and demonstrate good understanding of the underlying relationships between physical quantities;</p> <p>h) translate successfully data that is presented as prose, diagrams, drawings, tables or graphs from one form to another</p> <p>i) use chemical equations in a range of contexts</p> <p>j) select a wide range of facts, principles and concepts from the specification</p> <p>k) link together appropriate facts principles and concepts from different areas of the specification.</p> | <p>a) devise and plan experimental and investigative activities, selecting appropriate techniques</p> <p>b) demonstrate safe and skilful practical techniques and comment effectively on ethical issues</p> <p>c) make observations and measurements with appropriate precision and record these methodically</p> <p>d) interpret, explain, evaluate and communicate the results of their own and others' experimental and investigative activities, in appropriate contexts</p> <p>e) use an appropriate statistical technique to assess the validity of a hypothesis.</p> |
| C / D | <p>a) demonstrate reasonable knowledge and understanding of most principles, concepts and facts from the specification</p> <p>b) select the majority of relevant information from the specification</p> <p>b) show understanding of most principles, concepts and facts from the specification;</p> <p>c) organise and present information clearly in</p>  | <p>a) apply some principles and concepts in familiar and new contexts involving a few steps in the argument</p> <p>b) describe some trends and patterns shown by complex data presented in tabular or graphical form; interpret phenomena with some errors; and present arguments and evaluations logically</p> <p>c) comment on statements, conclusions or data</p> <p>d) evaluate any statements, conclusions or data</p> <p>e) carry out most of the calculations specified; and apply the principles of statistical analysis when directed</p>  | <p>a) devise and plan experimental and investigative activities, selecting appropriate techniques</p> <p>b) demonstrate safe and skilful practical techniques and comment on ethical issues</p> <p>c) make observations and measurements and record these methodically</p> <p>d) interpret, explain, evaluate and communicate the results of their own and</p>  |

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|   | <p>appropriate forms using scientific terminology.<br/> <b>d) write equations for most chemical reactions.</b></p>   | <p><b>f) carry out complex calculations specified for A level</b><br/> <b>g) carry out extended calculations, with some guidance, and demonstrate an understanding of the underlying relationships between physical quantities;</b><br/> h) translate data that is presented as prose, diagrams, drawings, tables or graphs from one form to another<br/> <b>i) use chemical equations in a range of contexts</b><br/> j) select a range of facts, principles and concepts from the specification<br/> k) Link together appropriate facts principles and concepts from different areas of the specification.</p>  | <p>others' experimental and investigative activities, in appropriate contexts<br/> <b>e) use an appropriate statistical technique</b></p>   |
| E | <p>a) demonstrate knowledge and understanding of some principles, concepts and facts from the specification<br/> b) select some relevant information from the specification<br/> <b>b) show understanding of some principles and facts from the specification;</b><br/> c) present information using basic terminology from the specification.<br/> <b>d) write equations for some chemical reactions.</b></p> | <p>a) apply given principles or concepts in familiar and new contexts involving a few steps in the argument<br/> b) describe some trends or patterns shown by data presented in tabular or graphical form<br/> <b>b) describe, and provide a limited explanation of, trends or patterns shown by complex data presented in tabular or graphical form</b><br/> c) identify, when directed, inconsistencies in conclusions or data<br/> <b>c) provide basic explanations and interpretations of some phenomena, presenting very limited evaluations;</b><br/> d) carry out some steps within calculations<br/> <b>d) carry out routine calculations, where guidance is given;</b><br/> e) translate data successfully from one form to another, in some contexts<br/> <b>e) use some chemical equations</b><br/> f) select some facts, principles and concepts from the specification<br/> g) put together some facts, principles and concepts from different areas of the specification.</p> | <p>a) devise and plan some aspects of experimental and investigative activities<br/> b) demonstrate safe practical techniques and comment on ethical issues<br/> c) make observations and measurements and record them<br/> d) interpret, explain and communicate some of the results of their own and others' experimental and investigative activities, in appropriate contexts<br/> <b>e) use a given statistical technique.</b></p> |

Biology only  
Chemistry only  
Physics only