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|  | **A** | **B** | **C** | **D** | **E** |
| **Investigation, Analysis and Evaluation** | **Critically** deconstructs a problem and designs a **logical, coherent,** and **detailed** physics investigation. | **Logically** deconstructs a problem and designs a **well-considered** and **clear** physics investigation. | Deconstructs a problem and designs a **considered** and **generally clear** physics investigation. | Prepares a **basic** deconstruction of a problem and **an** **outline** of a physics investigation. | **Attempts a simple** deconstruction of a problem and a procedure for a physics investigation. |
| Obtains, records, and represents data, using **appropriate** conventions and formats **accurately and highly effectively.** | Obtains, records, and represents data, using **appropriate** conventions and formats **mostly accurately** **and effectively.** | Obtains, records, and represents data, using **generally appropriate** conventions and formats with **some errors** but **generally accurately and effectively.** | Obtains, records, and represents data, using conventions and formats **inconsistently**, with **occasional** accuracy and effectiveness. | **Attempts** to record and represent **some** data, with **limited** accuracy or effectiveness. |
| **Systematically** analyses and interprets data and evidence to formulate **logical** conclusions with **detailed** justification. | **Logically** analyses and interprets data and evidence to formulate **suitable** conclusions with **reasonable** justification. | Undertakes **some** analysis and interpretation of data and evidence to formulate **generally appropriate** conclusions with **some** justification. | **Describes** data and undertakes some **basic** interpretation to formulate a **basic** conclusion. | **Attempts** to **describe** results **and/or** interpret data to formulate a **basic** conclusion. |
| **Critically** and **logically** evaluates procedures and their effect on data. | **Logically** evaluates procedures and their effect on data. | Evaluates procedures and **some** of their effect on data. | **Attempts** to evaluate procedures or **suggest** an effect on data. | **Acknowledges** that procedures affect data. |
| **Knowledge and Application** | Demonstrates **deep and broad** knowledge and understanding of a **range** of physics concepts. | Demonstrates **some depth** **and breadth** of knowledge and understanding of a **range** of physics concepts. | Demonstrates knowledge and understanding of a **general range** of physics concepts. | Demonstrates **some basic** knowledge and **partial** understanding of physics concepts. | Demonstrates **limited** recognition and **awareness** of physics concepts. |
| Applies physics concepts **highly effectively** in new **and** familiar contexts. | Applies physics concepts **mostly** effectively in new **and** familiar contexts. | Applies physics concepts **generally** effectively in new **or** familiar contexts. | Applies **some** physics concepts in **familiar** contexts. | **Attempts** to apply physics concepts in **familiar** contexts. |
| **Critically** explores and understands in **depth** the interaction between science and society. | **Logically** explores and understands in **some depth** the interaction between science and society. | Explores and understands **aspects** of the interaction between science and society. | **Partially** explores and **recognises** **aspects** of the interaction between science and society. | **Attempts** to explore and identify **an aspect** of the interaction between science and society. |
| Communicates knowledge and understanding of physics **coherently,** with **highly effective** use of appropriate terms, conventions, and representations. | Communicates knowledge and understanding of physics **mostly coherently**, with **effective** use of appropriate terms, conventions, and representations. | Communicates knowledge and understanding of physics **generally effectively**, using **some** appropriate terms, conventions, and representations. | Communicates **basic** physics information, using **some** appropriate terms, conventions, **and/or** representations. | **Attempts** to communicate **information** about physics. |