|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Obtaining Information** | **1** | **2** | **3** | **4** |
| Students obtain information from published material appropriate to the grade level. | No published material found | Information obtained from sources but material is inappropriate for grade level | Information appropriate for grade level but sources | Students obtained multiple sources of information appropriate to grade level |
| Students compare and coordinate information presented in various modes (e.g., graphs, diagrams, photographs, text, mathematical, verbal). | No comparisons are made with information | Attempt was made to use modes of presentation to coordinate, however attempt was not complete. | A single mode of presentation used to compare and coordinate | Multiple modes of information presentation used to compare and coordinate |
| **Evaluating Information** | **1** | **2** | **3** | **4** |
| Students analyze the validity and reliability of each source of information, comparing and contrasting the information from various sources. | Students do not have reliable sources nor attempt to analyze information | Students analyze unreliable sources or their analysis of the validity of each source is incorrect. | Various reliable sources used but not adequately analyzed | Various reliable sources used and analyzed |
| Students analyze the information to determine its meaning and relevance to phenomena. | Incomplete or missing analysis of phenomena | Students analyze information that is unrelated to phenomena | Partial analysis of phenomena and meaning of information is addressed | Analysis of phenomena is complete and students address meaning of the information |
| **Communicating information** | **1** | **2** | **3** | **4** |
| Students communicate information using at least two different formats (e.g., oral, graphical, textual, mathematical). | Students do not communicate information | Students use an inappropriate format to communicate information or communication was attempted but incomplete | Students use one format to correctly communicate information | Students use at least two different formats to communicate information |
| Students use communication that is clear and effective with the intended audience(s). | Students use unclear communication that is ineffective toward an incorrect audience | Students use unclear communication that is ineffective yet intended audience is used. | Student communication is clear but audience is unintended | Student communication is clear and effective with intended audience |
| **Connecting DCI and CCC** | **1** | **2** | **3** | **4** |
| Students’ communication includes clear connections between the targeted DCIs and the targeted CCCs in the context of a specific question, phenomenon, problem, or solution. | No connections between DCI and CCC | Connections between DCI and CCC exist but either the DCI and CCC are not connected to the appropriate question or phenomena. | A rudimentary connection addressed between DCI and CCC or connection is incomplete or only attempted to answer the question or address the phenomena | Specific connections addressed between each DCI and CCC in context of the question or phenomena |

|  |  |  |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |