SCIENTIFIC LITERACY RUBRIC

| SCORING DOMAIN | EMERGING | DEVELOPING | PROFICIENT | ADVANCED |
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| ARTICULATE A SCIENCE-RELATED ISSUE What is the evidence that the student can articulate a clear issue and explain the connection between the issue and science content? | The scientific, social or technological significance of the issue is unclear Science content contains inaccuracies | The scientific, social or technological significance of the issue is general with major gaps and leads to readily available answers Science content is accurate and makes general connections to the issue | The scientific, social or technological significance of the issue is specific with minor gaps and leads to readily available answers Science content is accurate and discusses specific connections to the issue | The scientific, social, or technological, significance of the issue is specific and comprehensive and leads to a challenging research project Science content is accurate and includes a clear, detailed, and relevant discussion of the connection to the issue |
| Make A CLAIM What is the evidence that the student can develop a claim? | • Makes an unclear claim or irrelevant claim. | • Makes a general and relevant claim with major lapses throughout the text. | • Makes a clear, specific, and consistent claim with minor lapses throughout the text. | • Makes a clear, specific, consistent, and logical claim throughout the text. |
| IDENTIFY EVIDENCE What is the evidence that the student can use evidence (textual, data, and/or multi- media) relevant to the claim? | Refers to evidence that is unclear or irrelevant to the claim. Refers to inconsistent evidence that is irrelevant or unclear. | Identifies limited or general evidence relevant to claim. Mentions inconsistent evidence or counterclaims relevant to the claim. | Identifies (cites) specific evidence relevant to claim. Identifies (cites) inconsistent evidence or counterclaims relevant to the claim. | Identifies (cites) and explains comprehensive, detailed evidence relevant to claim. Identifies (cites) and explains inconsistent evidence and the relevant to the claim. |
| JUSTIFY THE CLAIM What is the evidence that the student can analyze evidence to justify their claim and address counterclaims? | Analysis of evidence to justify the claim is missing, inaccurate, or unclear. Analysis of counterclaim evidence to justify the claim is missing, inaccurate, or unclear. | Analyzes and synthesizes evidence from multiple sources and used to justify the claim with major errors. Analyzes and synthesizes counterclaim evidence from multiple sources to support or refute the claim with major errors. | Analyzes and synthesizes evidence from multiple sources and used to justify the claim with minor errors. Analyzes and synthesizes counterclaim evidence from multiple sources to support or refute the claim with minor errors. | Analyzes and synthesizes evidence from multiple sources and used to accurately justify the claim. Analyzes and synthesizes counterclaim evidence from multiple sources to support or refute the claim. |

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| SCORING DOMAIN | EMERGING | E / | | D / | PROFICIENT | P / | ADVANCED |
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| EVALUATE THE ARGUMENT What is the evidence that the student can evaluate the argument? | • Identifies the strengths OR limitations of the argument are unclear or missing. | D | • Identifies and evaluates the strengths OR limitations of the argument with major errors. | P | • Identifies and evaluates the strengths AND limitations of the argument with minor errors. | A | • Identifies and evaluates the strengths AND limitations of the argument. |
| ORGANIZATION What is the evidence that the student can clearly communicate their argument to the intended audience? | Argument(s) are unclear or missing. Language and tone are inappropriate to the purpose and audience | | Arguments(s) are disorganized, underdeveloped and/or loosely sequenced with major transition gaps Language and tone are appropriate to the purpose and audience with major lapses. | | Argument(s) are organized, sufficiently developed and logically sequenced with minor transition gaps. Language and tone are appropriate to the purpose and audience with minor lapses. | | Argument(s) are organized, well developed, and logically sequenced. Language and tone are appropriate to the purpose and audience. |
| CONVENTIONS What is the evidence that the student can accurately use scientific conventions* to communicate ideas to others? | Citations within text and/or list of references or bibliography are missing. Norms and conventions of scientific writing are missing. | | Citations within text OR list of references/bibliography are incomplete and/or inconsistent in format. Follows the norms and conventions of scientific writing with major errors. | | Citations within text AND list of references/bibliography are complete and consistent in format with minor errors. Follows the norms and conventions of scientific writing with minor errors. | | Citations within text AND list of references/bibliography are complete, consistent in format, and accurate. Follows the norms and conventions of scientific writing accurately. |

* Scientific conventions refers to the use of scientific or technical terms, visual representations, or data (qualitative or quantitative)

