### Scientific Claim
A statement or conclusion that answers the original question or problem.

| Score: ____ |

### Evidence
Scientific data or information that supports the claim. The data/information needs to be relevant, accurate and sufficient to support the claim.

| Score: ____ |

### Scientific Reasoning
A justification that links the claim and evidence. It shows why the data and information counts as evidence by using relevant, accurate and sufficient scientific principles.

| Score: ____ |

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<th>Prompt</th>
<th>Class/Grade</th>
<th>Date</th>
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<tbody>
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<td>4</td>
<td>3</td>
<td>2</td>
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- **4**
  - Clear scientifically accurate claim that is placed correctly in the context of the prompt
  - Relevant, accurate and sufficient evidence is provided to support the claim
  - Explicit reasoning is provided that links all evidence to the claim.
  - The appropriate scientific principles (what we know in science) are described and organized logically, and are used to justify why the data/information counts as evidence.
  - The response describes an application of the scientific principles beyond the context of the prompt.
  - [Middle School only -- OR includes an effective rebuttal of alternative explanations.]

- **3**
  - Scientifically accurate claim
  - Relevant, accurate and sufficient evidence is provided to support the claim
  - Explicit reasoning is provided that links all relevant evidence to the claim
  - The appropriate scientific principles (what we know in science) are described and organized logically, and are used to justify why the data/information counts as evidence.

- **2**
  - Claim reveals partial understanding or a claim is implied but not clearly stated.
  - Accurate evidence is provided but it is not sufficient to support the claim
  - The reasoning does not link all relevant evidence to the claim
  - The appropriate scientific principles are not fully described or accurately used to justify why the data/information counts as evidence.

- **1**
  - No identifiable statement of claim.
  - No evidence is provided or the evidence is inaccurate.
  - No reasoning is provided or the reasoning does not support the claim.
# Boston Public Schools

**Common Writing Assignment: Science Rubric 2011-2012**

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### Rebuttal

Recognizes and describes alternative explanations (using the same evidence or by providing counter evidence) and the reasoning for why the alternative explanation is not appropriate.

Score: __

**Rebuttal is required for High School only**

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<tr>
<th>Score</th>
<th>4</th>
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<th>1</th>
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<tbody>
<tr>
<td></td>
<td>A rebuttal of alternative explanations is provided that includes relevant, accurate and sufficient (counter) evidence and reasoning.</td>
<td>A rebuttal of alternative explanations is provided that includes relevant, accurate and sufficient (counter) evidence and reasoning.</td>
<td>The alternative explanations that are provided are relevant and accurate but the (counter) evidence and reasoning are insufficient.</td>
<td>Does not recognize that alternative explanations exist or makes an inaccurate rebuttal.</td>
</tr>
</tbody>
</table>

### Conventions

Control of sentence structure, grammar and usage, and mechanics | Errors do not interfere with communication and/or clarity | Errors interfere somewhat with communication and/or clarity | Errors seriously interfere with communication AND clarity |
---|---|---|---|
Length and complexity of response provides opportunity for student to show control of standard English conventions | Few errors relative to length of response or complexity of sentence structure, grammar and usage, and mechanics | Too many errors relative to the length of the response or complexity of sentence structure, grammar and mechanics | Little control of sentence structure, grammar and usage, and mechanics |

### TOTAL: __

- □ No response to prompt or plagiarism receives a score of 0.

**TEACHER COMMENTS:**

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