

Climate Change Challenge: Final Product Rubric

Name

Date

Project Checklist: Your final product should include the following:

_____ **PART A:** A graphical representation of climate data from *Plot It!* or *Sea Level Rise: The Evidence* activities (in student portfolios).

_____ **PART B:** The tabular representation of emissions data from the *Local Emissions* activity (in student portfolios).

_____ **PART C:** A pledge statement with three specific activities to mitigate personal contributions to climate change.

_____ **PART D:** A paragraph explaining the climate and emissions data and justifying the pledge activities for a non-scientist Audience.

Rubric

Criteria	Proficient Climatologist	Apprentice Climatologist	Emerging Climatologist	Feedback
<p>MS-ESS3-2: Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.</p> <p>Use a graphical representation of climate data (Mean decadal temperature graph from the <i>Plot It!</i> activity or sea level rise graph from the <i>Sea Level Rise: The Evidence</i> activity) and an explanation to effectively communicate a risk associated with climate change.</p>	Climate data representation is accurate and properly labeled. It is fully described in the explanatory paragraph, including an association of the trend with risk.	Climate data representation is accurate and is described in the text.	Climate data representation is not yet accurate or described in the text.	
<p>MS-ESS3-5: Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.</p> <p>Use a tabular representation of emissions data (from the <i>Local Emissions</i> activity) and an explanation to communicate the relationship between climate change and human behavior effectively.</p>	Emissions data representation is accurate and properly labeled. The relationship between climate change and human behavior is fully described in the explanatory paragraph.	Emissions data representation is accurate and is described in the text.	Emissions data representation is not yet accurate or described in the text.	

Continued on next page

Criteria	Proficient Climatologist	Apprentice Climatologist	Emerging Climatologist	Feedback
<p>MS-ESS3-3: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.</p> <p>Create and defend a Climate Change Challenge Pledge that helps address the school community’s carbon footprint.</p>	<p>Climate Change Challenge Pledge effectively addresses common carbon-emitting habits in the school community, with attention to constraints.</p>	<p>Climate Change Challenge Pledge addresses carbon-emitting habits.</p>	<p>Climate Change Challenge Pledge does not yet address carbon-emitting habits.</p>	
<p>CCSS.ELA-LITERACY.SL.7.4: Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.</p> <p>Present a representation of climate data and a Climate Change Challenge Pledge using an explanation of the relationship between climate change and human behavior.</p>	<p>Student presents in a convincing and clear manner to an audience of non-scientists, with a focus on increasing understanding and motivation in response to climate change.</p>	<p>Student presents to an audience of non-scientists, focusing on climate change.</p>	<p>Student does not yet present or focus on climate change.</p>	