

Science and Engineering Practices

	1 - Beginning	2 - Developing	3 - Proficient	4 - Excelling
Standard 2: Developing and Using Models	Does not design a model to explain a scientific phenomena.	Designs a model based on observed phenomena	and explains and demonstrates its function	and/or evaluates its accuracy and limitations. and/or accurately apply a cross cutting concept to model




	1 - Beginning	2 - Developing	3 - Proficient	4 - Excelling
Standard 4: Analyzing and Interpreting Data	Does not analyze and interpret data to make valid and reliable scientific claims	Analyzes data by applying an appropriate model or mathematical concept (rate, percent, mean, etc.) to identify patterns or support a scientific claim	and evaluates either the limitations or the significance of the data analysis to make or support a scientific claim	and/or uses the evaluation to draw appropriate conclusions.



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Standard 6: Constructing Explanations	Does not construct explanations with valid claims, evidence, and reasoning.	Constructs a quantitative or qualitative claim, <i>(evidence may be inaccurate or irrelevant ; reasoning is inaccurate or inadequate.)</i>	and supports the claim with reliable evidence <i>(reasoning is inaccurate or inadequate)</i>	and/or provides reasoning in which scientific principles correctly link evidence to the claim

Scoring:	1.0 - Not Yet	1.5 - 70%	2.0 - 80%	2.5 - 85%	3.0 - 90%	3.5 - 95%	4.0 - 100%
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Crosscutting Concepts:

- ☐  Patterns
- ☐  Cause and Effect

- ☒  Scale, Proportion, and Quantity
- ☐  Systems and System Models
- ☐  Stability and Change

- ☐  Energy and Matter
- ☐  Structure and Function