

EMS 8th Grade Science Power Standards and Reporting Rubric

Standard #1: The student will demonstrate an understanding and apply Scientific Inquiry by using Claim, Evidence, Reasoning (CER) to write a scientific explanation.

Advanced(AD)	Proficient(PR)	Developing(DE)	Beginning(BE)
*I can make an accurate and clear claim. My claim is a complete descriptive sentence that gives information supporting my claim. *I can provide sufficient evidence to support my claim and extrapolate information from the evidence. *I can use scientific vocabulary and principles that apply. *I can demonstrate scientific reasoning by providing accurate and complete reasoning that links the evidence to the claim.	*I can make an accurate and clear claim. My claim is a complete descriptive sentence that gives information supporting my claim. *I can provide sufficient evidence to support my claim. *I can use scientific vocabulary and principles that apply.	*I can make an accurate, but incomplete, claim. *I can provide evidence to support my claim, but some of it may not apply to the claim. *I can include some scientific vocabulary and principles to support my claim, but not enough to be sufficient.	*I can make a claim, but it is not accurate. *I can provide evidence, but it is not complete and does not support the claim. *I can include some scientific vocabulary or evidence, but it is inaccurate and does not support the claim.

Standard 1 will be assessed at least four times throughout each year as students complete investigations. Students will use the CER format to scientifically explain a claim using evidence and vocabulary from the investigation.

Standard #2: The student will demonstrate understanding and application of Engineering Design principles.

Advanced(AD)	Proficient(PR)goal	Developing(DE)	Beginning(BE)
*I can develop a model based on criteria and constraints of design problem. *I can take into account scientific principles and potential impact on people/environment. *I can evaluate strengths and weaknesses of solution based on systematic processes.	*I can develop a model based on criteria and constraints of design problem. *I can take into account the relationship of my design and scientific principles.	*I can develop a model based on criteria and constraints of design problem.	*I can develop a model but may not meet the criteria and constraints of the design problem.

Standard 2 will be assessed when Engineering Design Challenges apply to content at each grade level.

Standard #3: The student will demonstrate understanding and application of Life Science targets for 8th grade.

Advanced(AD)	Proficient(PR)	Developing(DE)	Beginning(BE)
*I can use evidence to analyze Life Science content and apply abstract ideas to concrete problems.	*I can analyze Life Science content with few inaccuracies or gaps in knowledge, drawing conclusions or making inferences. *I can use evidence to support learning of Life Science content. *I can accurately use scientific vocabulary to support understanding of Life Science content..	*I can show understanding, but have trouble connecting observations and data to explain results. *I can use some scientific vocabulary to support understanding. *I can use evidence to summarize concepts and ideas but with gaps in understanding, drawing conclusions or making inferences.	*I can show limited understanding and have trouble connecting observations and data to results. *I can use limited or no vocabulary to support understanding.

Standard #4: The student will demonstrate understanding and application of Chemistry targets for 8th grade.

Advanced(AD)	Proficient(PR)	Developing(DE)	Beginning(BE)
*I can use evidence to analyze Chemistry content and apply abstract ideas to concrete problems.	*I can analyze Chemistry content with few inaccuracies or gaps in knowledge, drawing conclusions or making inferences. *I can use evidence to support learning of Chemistry content. *I can accurately use scientific vocabulary to support understanding of Chemistry content..	*I can show understanding, but have trouble connecting observations and data to explain results. *I can use some scientific vocabulary to support understanding. *I can use evidence to summarize concepts and ideas but with gaps in understanding, drawing conclusions or making inferences.	*I can show limited understanding and have trouble connecting observations and data to results. *I can use limited or no vocabulary to support understanding.

Standard #5: The student will demonstrate understanding and application of Physics targets for 8th grade.

Advanced(AD)	Proficient(PR)	Developing(DE)	Beginning(BE)
*I can use evidence to analyze Physics content and apply abstract ideas to concrete problems.	*I can analyze physics content with few inaccuracies or gaps in knowledge, drawing conclusions or making inferences. *I can use evidence to support learning of Physics content. *I can accurately use scientific vocabulary to support understanding of Physics content..	*I can show understanding, but have trouble connecting observations and data to explain results. *I can use some scientific vocabulary to support understanding. *I can use evidence to summarize concepts and ideas but with gaps in understanding, drawing conclusions or making inferences.	*I can show limited understanding and have trouble connecting observations and data to results. *I can use limited or no vocabulary to support understanding.

Standard #6: The student will demonstrate understanding and application of Earth Science targets for 8th grade.

Advanced(AD)	Proficient(PR)	Developing(DE)	Beginning(BE)
*I can use evidence to analyze Earth Science content and apply abstract ideas to concrete problems.	*I can analyze Earth Science content with few inaccuracies or gaps in knowledge, drawing conclusions or making inferences. *I can use evidence to support learning of Earth Science content. *I can accurately use scientific vocabulary to support understanding of Earth Science content..	*I can show understanding, but have trouble connecting observations and data to explain results. *I can use some scientific vocabulary to support understanding. *I can use evidence to summarize concepts and ideas but with gaps in understanding, drawing conclusions or making inferences.	*I can show limited understanding and have trouble connecting observations and data to results. *I can use limited or no vocabulary to support understanding.