

Scientific Reasoning – Rubric Assesses Competencies 1, 2E, & 4 in Tiers 1 & 2E

	Capstone 4	Milestones		Benchmark 1
		3	2	
Explanation of issues (optional)	Issue/problem to be considered critically is stated clearly & described comprehensively, delivering all relevant information necessary for full understanding.	Issue/problem to be considered critically is stated, described, & clarified so that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.	Issue/problem to be considered critically is stated without clarification or description.
Evidence (REQUIRED) <i>Selecting & using information to investigate a point of view or conclusion (from a topic of student's choice or an assigned topic, with assigned sources)</i>	Information is taken from source(s) with enough interpretation/ evaluation to develop a comprehensive, defensible analysis or synthesis.	Information is taken from source(s) with enough interpretation/ evaluation to develop a reasonable analysis or synthesis.	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis.	Information is taken from source(s) without any interpretation/ evaluation.
Influence of context & assumptions (optional)	Thoroughly (systematically & methodically) analyzes own & others' assumptions & carefully evaluates the relevance of contexts when presenting a position.	Identifies own & others' assumptions & several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).	Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position.
Analysis (REQUIRED) Conclusions & related outcomes (REQUIRED) (implications & consequences)	Organizes & synthesizes evidence to reveal insightful patterns, differences, or similarities related to focus. Conclusions & related outcomes (consequences & implications) are logical extrapolations & reflect student's informed evaluation & ability to place evidence & perspectives discussed in priority order.	Organizes evidence to reveal important patterns, differences, or similarities related to focus. Conclusion is logically tied to a range of information, which may include opposing viewpoints; related outcomes (consequences & implications) are identified clearly.	Organizes evidence, but the organization is not effective in revealing important patterns, differences, or similarities. Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences & implications) are identified clearly.	Lists evidence, but it is not organized and/or is unrelated to focus. Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences & implications) are oversimplified.