

**8th Grade Science
Prioritizing Worksheet**

Standard: 1 Nature of Science (SC.S.8.1)

- Demonstrate an understanding of history and nature of science as a human endeavor encompassing the contributions of diverse cultures and scientists.
- Demonstrate the ability to use the inquiry process to solve problems.

	Essential	Important	Compact
SC.O.8.1.1 Formulate scientific explanations based on historical observations and experimental evidence, accounting for variability in experimental results.			X
SC.O.8.1.2 Demonstrate how a testable methodology is employed to seek solutions for personal and societal issues. (e.g., "scientific method").			X
SC.O.8.1.3 Relate societal, cultural and economic issues to key scientific innovations.			X
SC.O.8.1.4 Conduct and/or design investigations that incorporate the skills and attitudes and/or values of scientific inquiry (e.g., established research protocol, accurate record keeping, replication of results and peer review, objectivity, openness, skepticism, fairness, or creativity and logic).			X
SC.O.8.1.5 Implement safe procedures and practices when manipulating equipment, materials, organisms, and models.		X	
SC.O.8.1.6 Use appropriate technology solutions within a problem solving setting to measure and collect data; interpret data; analyze and/or report data; interact with simulations; conduct research; and present and communicate conclusions.		X	
SC.O.8.1.7 Design, conduct, evaluate and revise experiments (e.g., compose a question to be investigated, design a controlled investigation that produces numeric data, evaluate the data in the context of scientific laws and principles, construct a conclusion based on findings, propose revisions to investigations based on manipulation of variables and/or analysis of error, or communicate and defend the results and conclusions).		X	
SC.O.8.1.8 Draw conclusions from a variety of data sources to analyze and interpret systems and models (e.g., use graphs and equations to measure and apply variables such as rate and scale, evaluate changes in trends and cycles, predict the influence of external variances such as potential sources of error, or interpret maps).		X	