

6-8 Science and Engineering Practices CAN I? DID I?	PRACTICE 5: Using Mathematical and Computational Thinking	Can I... ? Did I...? a) Use digital tools to analyze data for patterns and trends? b) Use mathematical models to describe or support a scientific conclusion or a design solution? c) Create a series of ordered steps (algorithm) to solve a problem? d) Apply calculations that are used in math class (ratio, rate, percent, etc.) to scientific questions and engineering problems? e) Use digital tools and/or math to test and compare engineering solutions?	Can I... ? Did I...? a) Construct an explanation using sufficient and appropriate evidence from valid and reliable sources (including my own experiments)? b) Construct an explanation using evidence and scientific ideas (reasoning) to show how the evidence supports the claim? c) Use scientific ideas to create or test an object, tool, process, or system? d) Use an engineering design process in a project to solve a problem that meets specific requirements? e) Refine how well a design works by prioritizing the design criteria, testing, and making changes to my design?	Can I... ? Did I...? a) Examine the evidence in two arguments on the same topic to see how it is used to support the different claims. b) Respectfully provide and receive feedback on an argument by citing evidence, and asking and answering questions? c) Create an argument with a claim, evidence, and reasoning that agrees or disagrees with an existing explanation or model? d) Think about how others might react to the argument being made? e) Work with others to create criteria and choose the design solution that best meets the criteria? f) Make an argument that supports or refutes different designs, processes, or systems based on specific criteria and constraints?	Can I... ? Did I...? a) Read and identify the main ideas, patterns, and/or evidence within informational texts and reliable media? b) Use observations and measurements from text and reliable media to clarify claims and results? c) Use evidence to critique the quality of the source and of the content? d) Reconsider a scientific claim, explanation or argument when presented with competing evidence? e) Communicate information in writing or oral presentations using various formats?
	PRACTICE 6: Constructing Explanations and Designing Solutions	Can I... ? Did I...?	Can I... ? Did I...?	Can I... ? Did I...?	Can I... ? Did I...?
	PRACTICE 7: Engaging in Argument from Evidence	Can I... ? Did I...?	Can I... ? Did I...?	Can I... ? Did I...?	Can I... ? Did I...?
	PRACTICE 8: Obtaining, Evaluating, and Communicating Information	Can I... ? Did I...?	Can I... ? Did I...?	Can I... ? Did I...?	Can I... ? Did I...?

6-8 Science and Engineering Practices CAN I? DID I?	PRACTICE 1: Asking Questions and Defining Problems	PRACTICE 2: Developing and Using Models	PRACTICE 3: Planning and Carrying Out Investigations	PRACTICE 4: Analyzing and Interpreting Data
	Can I... ? Did I...? a) Ask a question when I observe something that is new or unexpected to clarify or gather more information? b) Ask questions that require evidence to answer? c) Ask a question that helps to identify relationships between variables? d) Ask questions that challenge the logic of an argument or the interpretation of a data set? e) Describe a design problem that can be solved by creating a method or a system and that meets criteria and constraints?	Can I... ? Did I...? a) Evaluate and explain the limitations of a model? b) Make or revise a model based on evidence? c) Develop or use a model to: <ul style="list-style-type: none"> • make predictions? • describe the natural world? • describe unobservable relationships? • gather data? • test ideas? 	Can I... ? Did I...? a) Work alone or in a group to plan an investigation? b) Identify which variable changes and which variable stays the same in an experiment? c) Organize data? d) Decide how much data to collect? e) Collect data as evidence to help answer scientific questions or test a design? f) Collect data about how something works under different conditions?	Can I... ? Did I...? a) Make graphs that show mathematical relationships? b) Use graphs to identify relationships in large data sets? c) Figure out if a variable is related to or causes a change in the relationship? d) Use data as evidence to explain why something happened? e) Describe the data by calculating the mean, median, or mode and range? f) Evaluate the limitations of our data, tools, or systems? g) Compare and contrast data to look for similarities and differences? h) Find the range in which my object, tool, process or system works best?