Observation Checklist Part 1 **Science and Engineering Practices** **Grade 6-8** Use the Bronze (1), Silver (2), Gold (3), and Platinum (4) proficiency level descriptions, or another assessment scale that is relevant to your school context.		Name(s)										
Practice 1: I observed students asking questions												
a	to seek more information.											
b	to seek evidence for a claim.											
c	to challenge a claim or interpretation of data.											
d	to identify and understand independent and dependent variables.											
e	that can be investigated in this class.											
Practice 2: I observed students developing and/or using a model												
a	to explore its limitations.											
b	to explore what happens when parts of the model are changed.											
c	to show the relationship between variables.											
d	to make predictions.											
e	to generate data about what they are designing or investigating.											
Practice 3: I observed students planning and carrying out investigations												
a	that included independent and dependent variables and controls.											
b	that included appropriate measurement and recording tools.											
c	that tested the accuracy of various methods for collecting data.											
d	to collect data to answer a scientific question or test a design solution.											
e	to test the performance of a design under a range of conditions.											
Practice 4: I observed students analyzing and interpreting data												
a	by constructing graphs.											
b	to identify linear and non-linear relationships.											
c	to distinguish between cause and effect vs. correlational relationships.											
d	by using statistics and probability such as mean and percentage.											
e	to determine similarities and differences in findings.											
f	to determine a way to optimize their solution to a design problem.											

Notes:

Observation Checklist Part 2

Science and Engineering Practices
Grade 6-8

Use the Bronze (1), Silver (2), Gold (3), and Platinum (4) proficiency level descriptions, or another assessment scale that is relevant to your school context.

		Name(s)										
Practice 5: I observed students using mathematics and computational thinking												
a	by including mathematical representations in their explanations and design solutions.											
b	by using an algorithm to solve a problem.											
c	by using concepts such as ratio, rate, percent, basic operations, or simple algebra.											
Practice 6: I observed students constructing explanations and design solutions												
a	that included quantitative and qualitative relationships.											
b	that are based on scientific ideas, laws and theories.											
c	that connect scientific ideas, laws, and theories to their own observations.											
d	that apply scientific ideas, laws, and theories.											
e	to help optimize design ideas while making tradeoffs and revisions.											
Practice 7: I observed students engaging in arguments from evidence												
a	that compare and critique two arguments on the same topic.											
b	while respectfully providing and receiving critiques using appropriate evidence.											
c	while presenting oral or written statements supported by evidence.											
d	while evaluating different design solutions based on agreed-upon criteria and constraints.											
Practice 8: I observed students evaluating and communicating information												
a	when they read scientific text adapted for the classroom.											
b	when they read or wrote information in combinations of text, graphs, diagrams, and other media.											
c	when they created presentations about their investigations and/or design solutions.											

Notes: