Constructing Explanations

Elements of Student Performance
High School

Articulating the explanation of phenomena
Construct an explanation that includes the relevant disciplinary core idea <u>and</u> the relevant crosscutting concept.

Evidence
Identify and describe the evidence necessary for constructing an explanation. Use a variety of valid and reliable sources for the evidence, which may include students' own investigations, theories, simulations, and peer review. Describe evidence that includes qualitative or quantitative relationships between dependent and independent variables. Describe the source of the evidence and the technology used to obtain that evidence.

Reasoning
Use reasoning to logically connect the evidence to the explanation. Describe a chain of reasoning that includes the relevant crosscutting concept. Base reasoning on the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future.

Revising the explanation
Revise their explanation and justify the revision when given new data or information.

HS-PS1-2 / HS-PS1-5 / HS-LS1-1 / HS-LS1-6 / HS-LS2-3 / HS-LS4-2 / HS-LS4-4 / HS-ESS1-2
HS-ESS1-6 / HS-ESS3-1