Life Science – Biology: Ecosystems and Populations (Construct a model of your ecosystem, include measurements, and biomass graphs)

Standard 4: Ecosystems: Interactions, Energy, and Dynamics – Understand and analyze the characteristics, functions, and behavioral interactions within an ecosystem as demonstrated through the integration of scientific and engineering practices and cross-cutting concepts (LS 2)

Indicator(s)	Does Not Meet 0-69	Partially Meets 70-75	Meets (Proficient) 76-100 see assessment breakdown attached	Exceeds (High Distinction) Over 100 see assessment breakdown attached
HS LS 2-1: Use mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.	The student is not able to demonstrate computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.	The student is not able to fully execute mathematical and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales.	The student is able to consistently and independently demonstrate the ability to: ✓ Measure the boundaries of their ecosystems using the metric system ✓ Create a model of this system illustrating the environmental terms given on the instruction sheet	In addition to meeting the standard, the student will: ✓ Measure the boundaries of their ecosystems using the metric system **and compare this information to a peer's model, compile and integrate the models.**

Life Science – Biology: Ecosystems and Populations (Construct a model of your ecosystem, include measurements, and biomass graphs)

HS LS2-2: Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.	The student is not able to demonstrate mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different	The student is not able to fully execute mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different	The student is able to consistently and independently demonstrate the ability to: ✓ Apply the biomass computations of two different species found within their ecosystems and graph and detail this data into the ecosystem model	In addition to meeting the standard, the student will: ✓ In addition to meeting the requirements for MEETS, the student must compare the biomass computations of **their two species to that of a peer and** graph this data.