

High School

Communication and Collaboration **CC**

- 1 Communicate evidence, investigations, analyses, and the solution(s) of a problem in multiple media forms appropriate for the audience.** **HS.CC.1**
- 2 Implement roles and responsibilities to collaborate, contribute, and/or lead within and across various group settings (i.e., online, onsite and/or hybrid) and situations.** **HS.CC.2**
- 3 Evaluate competing solutions or arguments in a systematic way based on qualitative and/or quantitative evidence.** **HS.CC.3**

Data Analysis and Measurement **DM**

- 1 Use multiple systems of measurement (i.e., standard and metric) and data sets (e.g., plots, tables, graphs, charts) defined in course-level content standards to analyze real-world scenarios and the mathematical relationships represented by the data.** **HS.DM.1**
- 2 Construct visual representations or conduct statistical analyses defined in course-level content standards.** **HS.DM.2**
- 3 Use approximations and evaluate reasonableness of observations, results, and solutions throughout processes.** **HS.DM.3**

Inquiry-Based Approaches and Problem Solving **IPS**

- 1 Conduct or extend an investigation, analyze results, iterate, and revise to improve the design.** **HS.IPS.1**
- 2 Determine one or more viable solutions using data and information to resolve a scenario given criteria and constraints.** **HS.IPS.2**
- 3 Integrate processes and methodologies across disciplines to incorporate multiple sources of evidence, including data generated by the student, to support defining a solution.** **HS.IPS.3**
- 4 Evaluate data analysis to determine alignment to the construct, validity and/or reliability concerns.** **HS.IPS.4**
- 5 Design and conduct surveys or experiments minimizing bias and defining limitations of the data set used for analysis (e.g., measurement error, sample selection).** **HS.IPS.5**

Applications and Modeling **AM**

- 1 Interpret and evaluate relationships among data sets.** **HS.AM.1**

2 Create advanced models (e.g., mathematical models, computer simulations) to represent and explain natural and designed systems, defined in course-level content standards. HS.AM.2

3 Use evidence-based models to describe relationships between systems or between components of a single system. HS.AM.3

4 Demonstrate the use of computational, graphical, virtual, mathematical, and/or physical modeling to identify conflicting considerations before the entire system or solution is developed. HS.AM.4

Information and Digital Literacy IDL

1 Analyze tradeoffs of using a variety of tools to solve a given problem including technology. HS.IDL.1

2 Review and compile information from multiple sources, including sources generated by the student, to solve a problem. HS.IDL.2

3 Evaluate the potential impact (short and/or long-term) of different technology solutions on society and the environment. HS.IDL.3