Name: Date: Period:

Module: Engineering Design	Unit: Predictive Analytics - POM	ELABORATE

Assessment Ticket: EDP Choice Board

Learning Target:

Engineering Design Process (EDP)

Column A - Real World Applications

Which choice did you select? ____ Army Engineer Video ____ Navy Career

What are some technologies the US Army and Navy use science to engineer?

Column B - Concept Reading

Which choice did you select? ____ Design Process Read ____ Design Process in Action Read

Describe the stages/phases/steps of the EDP.

Column C- Video Watch

Which choice did you select? ____ AEOP Jr. Solar Sprint Video ____ Football EDP

Explain how the scientists and engineers would use the EDP?

Column D - Practice It!

Which choice did you select?

____ PBS DP Interactive _____Option 1 _____Option 2 _____Option 3 _____Option 4 _____Option 5

Based on the Interactive, Virtual Simulation, or Design Challenge you optioned to complete, use either the (1) Experimental Design or (2) Engineering Design Process to improve your understanding of scientific methods and engineering. (Each section is hyperlinked to AEOP eCYBERMISSION rubrics.)	
Scientific Investigation A. PROBLEM STATEMENT: State a possible	Engineering Design A. PROBLEM STATEMENT: State a possible

research question for the activity option you experienced. B. EXPERIMENTAL DESIGN: State a possible hypothesis. ❏ Explain the independent and dependent variables; including experimental constants and the importance of a control group. ❏ Describe the materials and procedures in the experiment or test. C. DATA COLLECTION & ANALYSIS: What qualitative and quantitative data can or was collected? ❏ Explain the outcome of the experiment or test. D. DRAWING CONCLUSIONS: Justify how the data addressed the research question and hypothesis. E. TEAM COLLABORATION: How would group/team members work together to complete the task (or do it better)? F. BENEFIT TO THE COMMUNITY: Explain how your client, audience, stakeholders, and/or community members (1) would use this data and (2) why the research question should be important to them.	research question for the activity option you experienced. B. DESIGN DEVELOPMENT: Describe the criterias and constraints used on the design/model. C. BUILD MODEL OR PROTOTYPE: Illustrate the model or prototype prior to building. ❏ Provide an illustration or photo of the FINAL model/prototype. D. DRAWING CONCLUSIONS: Form connections between the testing, data collected, and how a solution was developed for the problem. E. TEAM COLLABORATION: How would group/team members work together to complete the task (or do it better)? F. BENEFIT TO THE COMMUNITY: Explain how your client, audience, stakeholders, and/or community members (1) would use this data and (2) why the research question should be important to them.

Rubrics are from the AEOP eCYBERMISSION programs.