The goals of Challenger's RENDEZVOUS / MOON / SCIENTIST Mission experiences are to increase student engagement in STEM and to address the following standards and skills:

21st CENTURY SKILLS

- PROBLEM SOLVING and CRITICAL THINKING
- COMMUNICATION and COLLABORATION
- FLEXIBILITY and ADAPTABILITY
- INITIATIVE and SELF-DIRECTION
- PRODUCTIVITY and ACCOUNTABILITY
- ITC (INFORMATION, COMMUNICATIONS and TECHNOLOGY) LITERACY

The NEXT GENERATION SCIENCE STANDARDS Framework Practices

- Engage students in the Scientific Enterprise
- Practice 4:
    - Collecting and Analyzing and Communicating Scientific Data to inspire students to consider careers in STEM.
    - Use spreadsheets, databases, tables, charts, graphs, statistics, mathematics, and information and computer technology to collate, summarize, and display data and to explore relationships between variables.
- Practice 5:
    - Use grade-level-appropriate understanding of mathematics and statistics in analyzing data.
- Practice 7:
    - Construct a scientific argument showing how data support a claim.
- Practice 8:
    - Communicating in written or spoken form is another fundamental practice of science; it requires scientists to describe observations precisely, clarify their thinking, and justify their arguments.
    - Evaluate individual and group communication for clarity, and work to improve communications.
    - Practice in interpreting tables, diagrams, and charts and coordinating information conveyed by them with information in written text.
    - Learn technical terms but also more general academic language, such as "analyze" or "correlation," which are not part of most students' everyday vocabulary and thus need specific elaboration if they are to make sense of scientific text.

The COMMON CORE

- Math
    - (RENDEZVOUS mission) The Number System CCSS.Math.Content.6.NS.C.5.
      Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts.

- ELA-Literacy
    - Science and Technical Subjects – Integration of Knowledge and Ideas CCSS.ELA-Literacy.RST.6-8.7.
      Use spreadsheets, databases, tables, charts, graphs, statistics, mathematics, and information and computer technology to collate, summarize, and display data and to explore relationships between variables. Students should have opportunities to learn standard techniques for displaying, analyzing, and interpreting data; such techniques include different types of graphs, the identification of outliers in the data set, and averaging to reduce the effects of measurement error. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

    - Science and Technical Subjects – Integration of Knowledge and Ideas CCSS.ELA-Literacy.RST.6-8.7.
      Students should have opportunities to learn standard techniques for displaying, analyzing, and interpreting data; such techniques include different types of graphs, the identification of outliers in the data set, and averaging to reduce the effects of measurement error. Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).

    - Reading Informational Text – Craft and Structure CCSS.ELA-Literacy.RI.6.4.
      Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings.

    - Science and Technical Subjects – Key Ideas and Details CCSS.ELA-Literacy.RST.6-8.3
      Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.