

Defining STEM through MND

STEM holds different meanings to users in the education communities. My NASA Data offers a unique perspective on STEM Education as we focus on data literacy within an Earth Systems framework. See the table below for a description of how S, T, E, and M are addressed throughout the various *My NASA Data* resources.

Science	Technology	Engineering	Mathematics
<p>MND uses a systems-approach to understand Earth Science phenomena</p> <p>Target NGSS Disciplinary Core Ideas:</p> <ul style="list-style-type: none"> • Earth and Human Activity • Earth's Systems • Earth's Place in the Universe • Earth and the Solar System • Earth Materials and Systems • Plate Tectonics and Large-scale Systems • The Role of Water in Earth's Surface Processes • Weather and Climate • Biogeology • Natural Resources • Human Impacts on Earth Systems • Global Climate Change <p>Target NGSS Science and Engineering Practices:</p> <ul style="list-style-type: none"> • Asking Questions and Defining Problems • Constructing Explanations • Engaging in Argument from Evidence 	<p>MND features data collected from payload technologies (sensors) associated with NASA Earth Science Missions. NOTE: MND learners are <i>not</i> developing technologies, but rather engage in technology to develop research questions, model phenomena, & extract meaning.</p> <p>Target NGSS Science and Engineering Practices:</p> <ul style="list-style-type: none"> • Asking Questions and Defining Problems • Developing & Using Models • Obtaining, Evaluating, & Communicating Information 	<p>This practice involves an iterative process that engineers use to guide problem-solving; this practice is essential to NASA's mission success. NOTE: My NASA Data does not expressly integrate engineering design in our resources. MND recognizes that Engineering enables NASA's efforts to advance science and math.</p> <p>See the <i>STEM Career Connections</i> for job profiles and NASA professionals whose work supports NASA's goals of better understanding the Earth System. MND features the important work that engineers and related careers contribute to NASA missions.</p>	<p>MND offers resources for analyzing, interpreting, and modeling of real-world geoscience data from each of the spheres within the Earth System.</p> <p>Target NGSS Science and Engineering Practices:</p> <ul style="list-style-type: none"> • Analyzing and Interpreting Data • Using Mathematics and Computational Thinking <p>Target Common Core Mathematics Domains:</p> <ul style="list-style-type: none"> • Measurement & Data (Grades 3-5) • Statistics & Probability (6-8) • Statistics (9-12) • Number & Quantity (9-12)