

Building Strong Mines

New Brunswick	
Grade 5	
Living and Technological Systems	
<u>General Curriculum Outcomes:</u>	<p>GCO 1 Students will develop the skills required for scientific and technological inquiries, for solving problems, for communicating scientific ideas and results, for working collaboratively, and for making informed decisions (scientific literacy).</p> <p>GCO 2 Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology (STSE).</p>
<u>Specific Curriculum Outcomes:</u>	<p>SCO 1.1 Students will plan investigations by asking questions, making inferences, and selecting and using equipment or technology needed to solve a specific problem in the natural world.</p> <p>SCO 2.1 Students will consider factors that support responsible application of scientific and technological knowledge and demonstrate an understanding of sustainable practices</p>
<u>Concepts and Content:</u>	<p>Identify internal forces acting on a structure and describe their effects on the structure: tension, compression, torsion or torque, and shear.</p> <p>Identify external forces acting on a structure and describe their effects on the structure: Gravity, Symmetry, and Load</p>

Grade 9	
Applied Technology	
<u>General Curriculum Outcomes:</u>	<p>GCO 1 Students will develop the skills required for scientific and technological inquiries, for solving problems, for communicating scientific ideas and results, for working collaboratively, and for making informed decisions (scientific literacy).</p> <p>GCO 2 Students will develop an understanding of the nature of science and technology, of the relationships between science and technology, and of the social and environmental contexts of science and technology (STSE).</p>
<u>Specific Curriculum Outcomes:</u>	<p>SCO 1.1 Students will ask questions about relationships between and among observable variables to plan investigations (scientific inquiry and technological problem-solving) to address those questions.</p> <p>SCO 1.3 Students will analyse and interpret qualitative and quantitative data to construct explanations.</p> <p>SCO 2.1 Students will consider factors that support responsible application of scientific and technological knowledge and demonstrate an understanding of sustainable practices.</p>
<u>Core Ideas and Contexts:</u>	<p>Design Challenge</p> <ul style="list-style-type: none"> - Draw on prior science and technological knowledge related to unifying ideas matter, energy, models and systems - Seek inspiration in Earth’s operating system where appropriate - Criteria and constraints may include social, technological or environmental considerations specific to problem under investigation