

## Mighty Mining Machines

<b>Ontario</b>	
<b>Grade 4</b>	
<b>Strand D: Structures and Mechanisms</b>	
<u>Specific Expectations:</u>	<p>D1.1 assess the impacts of machines and their mechanisms on the daily lives of people in various communities</p> <p>D2.1 identify machines that are used in daily life, and describe their purposes</p>
<b>Strand A: STEM Skills and Connections</b>	
<u>Specific Expectations:</u>	A3.1 describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems
<b>Grade 8</b>	
<b>Strand D: Structures and Mechanisms</b>	
<u>Specific Expectations:</u>	<p>D2.4 use the scientific terms displacement, force, work, energy, and efficiency to describe everyday experiences</p> <p>D2.6 explain the relationship between input and output forces and determine the mechanical advantage of various mechanical systems, including simple machines</p> <p>D2.9 describe technological innovations involving mechanical systems that have increased productivity in various industries</p>
<b>Strand A: STEM Skills and Connections</b>	
<u>Specific Expectations:</u>	A3.1 describe practical applications of science and technology concepts in various occupations, including skilled trades, and how these applications address real-world problems