

## Mighty Mining Machines

<b>Manitoba</b>	
<b>Grade 5</b>	
<b>Cluster 3: Forces and Simple Machines</b>	
<u>Specific Learning Outcomes:</u>	<p>5-3-01 Use appropriate vocabulary related to their investigations of forces and simple machines. Include: applied force, balanced and unbalanced forces, fulcrum, load, friction, terms related to types of simple machines</p> <p>5-3-06 Identify common devices and systems that incorporate pulleys and/or gears.</p> <p>5-3-10 Identify and describe types of simple machines. Include: levers, wheel and axle, pulley, gear, inclined plane, screw, wedge.</p> <p>5-3-11 Describe the advantage of using simple machines to move or lift a given load. Include: to decrease the force required; to increase the resulting force; to change the direction of the applied force</p> <p>5-3-14 Use the design process to construct a prototype containing a system of two or more different simple machines that move in a controlled way to perform a specific function</p>
<b>Cluster 0: Overall Skills and Attitudes</b>	
<u>Specific Learning Outcomes:</u>	<p>5-0-4a Carry out, with guidance, procedures that comprise a fair test.</p> <p>5-0-4c Work cooperatively with team members to carry out a plan, and troubleshoot problems as they arise.</p> <p>5-0-4e Use tools and materials in a manner that ensures personal safety and the safety of others.</p> <p>5-0-5c Select and use tools to observe, measure, and construct.</p> <p>5-0-8g Describe positive and negative effects of scientific and technological endeavours.</p> <p>5-0-9c Demonstrate confidence in their ability to carry out investigations.</p>