Mighty Mining Machines

Saskatchewan	
Grade 5	
Forces and Simple Machines	
Outcomes: FM5.2 Investigate characteristics of simple machines, including levers, wheels and axles, pulleys, inclined planes, screws, and wedges, for moving and lifting loads.	Indicators: (a) Pose and refine testable questions about the operation of simple machines. (c) Select and safely use tools and materials in a manner that ensures personal safety and the safety of others when investigating the characteristics of simple machines. (k) Design and construct a prototype of a simple machine which is meant to accomplish a student-identified task. (n) Recognize that scientific processes and ideas help explain how and why simple machines operate. (o) Pose new questions to investigate about the characteristics of simple machines.
FM5.3 Assess how natural and man-made forces and simple machines affect individuals, society, and the environment.	(a) Provide examples of simple and complex machines used at home, in school, and throughout their community. (l) Analyze the ways in which various combinations of simple machines can be combined to create complex machines.
Grade 10	
Career Investigation	
Outcomes: SCI10-CI1 Investigate career paths related to various branches and sub-branches of science.	Indicators: (b) Explore the breadth of science-related work roles and who is engaged in those work roles in the community.
Forces and Motion in our World	
SCI10-FM1 Explore the development of motion related technologies and their impacts on self and society.	(c) Evaluate the historical development of a motion-related technology, including the role of continued testing in the development and improvement of the technology. (d) Design, construct and evaluate a prototype of an object that meets a student-identified need related to motion.