Middle School Earth Space Science (6th grade)Earth's Systems	Links
Standard:	
• **MS-ESS2-1.** Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process. •	MS-ESS2-1
• **MS-ESS2-4.** Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	MS-ESS2-4
• **MS-ESS3-1.** Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes. •	MS-ESS3-1
21st Century Learning Expectations: • Hinsdale students will communicate through various means • Hinsdale students will be able to solve problems	Link for 21st Century Learning Expectations

Enduring Understandings (cross cutting concepts): • Cause and effect relationships may be used to predict phenomena in natural or designed systems. (MS-ESS3-1) • Within a natural or designed system, the transfer of energy drives the motion and/or cycling of matter. (MS-ESS2-4) • Explanations of stability and change in natural or designed systems can be constructed by examining the changes over time and processes at different scales, including the atomic scale. (MS-ESS2-1)	
Learning Competencies (engineering practices)	**Essential Questions (core ideas)**
Students will be able to: (NGSS Science and Engineering practices) Develop and use a model to describe phenomena. (MS-ESS2-1) • Develop a model to describe unobservable mechanisms. (MS-ESS2-4) • Construct a scientific explanation based on valid and reliable evidence obtained from sources (including the students' own experiments) and the assumption that theories and laws that describe the natural world operate today as they did in the past and will continue to do so in the future. (MS-ESS3-1)	• What are Earth's systems and how do they work? • Why do we care about Earth's systems?
Performance Task Sample/Resources: NSTA Dig Into Mining - The Story of Copper: Patterns of Natural Resources	