Middle School Earth Space Science (6th grade) Human Impact	Links
Standard:	
MS-ESS3-2. Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.	MS-ESS3-2
MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.	MS-ESS3-3
MS-ESS3-4. Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.	MS-ESS3-4
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): • Graphs, charts, and images can be used to identify patterns in data. (MS-ESS3-2) • Relationships can be classified as causal or correlational, and correlation does not necessarily imply causation. (MS-ESS3-3) • Cause and effect relationships may be used to predict phenomena in natural or designed systems. (MS-ESS3-4) • All human activity draws on natural resources and has both short and long-term consequences, positive as well as negative, for the health of people and the natural environment. (MS-ESS3-4)	

• The uses of technologies and any limitations on their use are driven by individual or societal needs, desires, and values; by the findings of scientific research; and by differences in such factors as climate, natural resources, and economic conditions. Thus technology use varies from region to region and over time. (MS-ESS3-2),(MS-ESS3-3) • Scientific knowledge can describe the consequences of actions but does not necessarily prescribe the decisions that society takes. (MS-ESS3-4)	
Learning Competencies (engineering practices)	**Essential Questions (core ideas)**
Students will be able to: (NGSS Science and Engineering practices) • Analyze and interpret data to determine similarities and differences in findings. (MS-ESS3-2) • Apply scientific principles to design an object, tool, process or system. (MS-ESS3-3) • Construct an oral and written argument supported by empirical evidence and scientific reasoning to support or refute an explanation or a model for a phenomenon or a solution to a problem. (MS-ESS3-4)	• What are human impacts on the Earth? • What are human impacts on space?
Performance Task Sample: NSTA I Breathe WHAT?? NSTA Cleaning the Air	