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The Future of Energy

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Energy is the number one problem that faces humanity in the next 50 years. In the event of a natural disaster and long-term energy loss, what will you do? This project-based unit, “The Future of Energy”, is about world energy production, consumption, and its environmental impact. The unit begins with energy history, starting with the carbon cycle and the formation of fossil fuels and seeks to explore the human environmental impact of current usage and dependence on conventional energy. This unit will also teach students how to research alternative energies, including nuclear, geothermal, wind, and solar in order to apply this deeper knowledge gained to engage in a Socratic Seminar about the topic. The unit concludes with the students innovating a contraption to cook food and make potable water in the event of a power outage. The unit will take place over five weeks in a sixth grade math and science classroom. It can be adapted for upper elementary through high school aged students.

Key words: fossil fuels human impact, carbon cycle, renewable energy, clean energy, science and engineering

(Developed for Science, grade 6; recommended for Science, grades 5-12)