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Curriculum Units by Fellows of the National Initiative
2024 Volume IV: Energy: Past, Present, and Future

Energy: Virginia's Past, Present, and Future Will Blow You Away!

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The curriculum unit explores how Virginia has used its resources to meet its energy needs and how these energy resources have molded Virginia through the years. For hundreds of years, railroads have hauled coal from southwest Virginia across the state to the port on the coast. For centuries, coal has provided cheap energy, but now the world is paying the price for the damage fossil fuel use has caused. The curriculum unit titled *Energy: Virginia's Past, Present, and Future Will Blow You Away!* looks to the future and focuses on wind energy as a renewable energy source that can help our planet survive. Through hands-on demonstrations and projects, students will explore what causes wind, the power of wind, and the design principles of wind turbines. Students will create a model of a turbine including how artificial reefs along the base of wind turbines increase biodiversity in marine ecosystems. The unit is designed for fourth and fifth grade students, but it could be adapted for middle school science.

(Developed for Science and Social Studies, grade 4; recommended for Science, grades 4-5, and Social Studies, grade 4)

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