



YALE NATIONAL INITIATIVE

to strengthen teaching in public schools®

Curriculum Units by Fellows of the National Initiative
2009 Volume VII: Energy, Climate, Environment

Energy Quest: Exploring Sun, Wind, and Water

Guide for Curriculum Unit 09.07.02, published September 2009

by Ann-Marie Chiyeni

This curriculum unit is designed to target 4th and 5th grade learners, although the activities and material are appropriate and adaptable for 3rd grade through high school. The rationale behind the unit is that it is vital to our global future to educate students on making informed energy choices and that this learning should be an active and dynamic process for students. The first part of the unit will begin with the most basic concepts of what energy is. The learning will then transition into exploring different energy sources and an investigation of how use of renewable and non-renewable resources impact climate and the environment. In the next part of the unit, the two grade levels will diverge and begin a focused study of their particular energy source(s). 4th grade students will examine solar energy through using the process of scientific inquiry and experimentation. The 5th grade students will look at the energy sources of wind and water through the lens of technological design. The overall goal of the "Energy Quest" unit is to engage students in exciting and authentic hands-on learning in science and to make them more knowledgeable consumers of energy in the future.

(Developed for Science Resource Lab, grades 4-5; recommended for Science, grades 3-8)

<https://teachers.yale.edu>

©2023 by the Yale-New Haven Teachers Institute, Yale University, All Rights Reserved. Yale National Initiative®, Yale-New Haven Teachers Institute®, On Common Ground®, and League of Teachers Institutes® are registered trademarks of Yale University.

For terms of use visit https://teachers.yale.edu/terms_of_use