



Energy and the City Person

Guide for Curriculum Unit 81.05.08
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This unit was designed for urban students. It is divided into three sections. (1) You and Energy. This is an investigation into the human cell as a complete energy system in terms of input, work accomplished and output. The concepts of what constitutes fuel, desirable output and waste products are developed from this model in subsequent sections. Demonstrations of potential and kinetic energy which accompany their definitions and evidence of the interchangeability of forms of energy in simple situations allow use of terms and energy units. Memorization of terms and definitions are kept to a minimum and visual and student involvement are emphasized.

2. Energy and the City. In this section the student is involved in his city's energy situation by presented information and observational activities leading to the development of a slide show and cassette to present this picture to others. The concept of exponential growth and energy use throughout the history of man to the complexities of energy needs in the urban lifestyle is developed. The Connecticut energy picture with its particular source and waste products problems is studied and students are asked to do simple surveys of their homes to increase their awareness.

3. Energy and the Future. A brief review of our energy mix, the energy crisis, past energy policies and emerging new ones are developed around information from the media and the National Geographic filmstrip series "A World of Energy." The students complete the unit by composing their own position papers on their energy futures.

(Recommended for 8th grade Earth Science, 9th grade Physical Science and Ungraded General Science.)

Key Words

Human Energy Systems Biology

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