

Overview

This module provides links for sustainability, energy and climate change curriculum. All of the links contain lessons that are available at no charge for teachers. The module also includes a student research activity and presentation project.

Objectives

1. Students will be able to define and explain the following terms:
 - Sustainability
 - Carbon footprint
 - Ecological Footprint
2. Students will be able to identify and describe examples of the following:
 - Renewable vs. nonrenewable sources of energy
 - Types of energy used to generate electricity
3. Students will work in teams to collect, organize, and present information on one of the following topics related to sustainability:
 - Energy use
 - Transportation
 - Water
 - Waste

Required Materials

Sustainability, energy or climate change curriculum

Computers and internet access for all students

Poster board

Construction Paper

Markers

Sources of Sustainability Curriculum



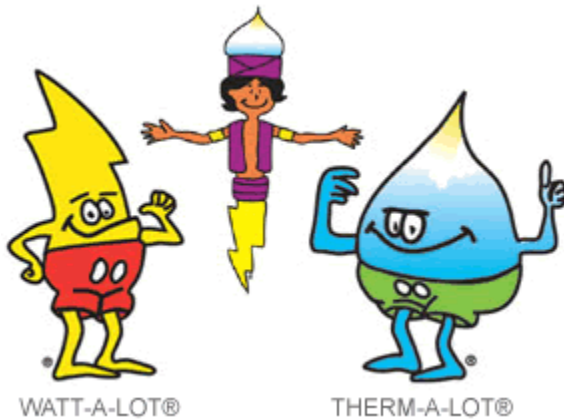
<http://www.facingthefuture.org/default.aspx>

This website includes a **Global Sustainability Curriculum Finder** that allows you to find curriculum resources and related websites based on the grade, subject, and sustainability topic that you are interested in.

Most items are available at no cost and can be downloaded directly from this site.

PG&E: The Energenius® Program

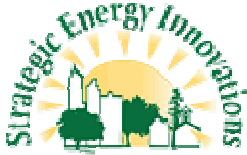
<http://www.pge.com/myhome/edusafety/teach/energenius/index.shtml>



Grades 6-8 Bill Buster - 7 lesson plans (free by request from PG&E website)

Bill Buster identifies nine sources of energy, including alternative sources such as wind and solar energy. Through "Source Cards," students trace the production of energy from natural resources through the delivery of energy to their homes. They learn that they themselves can be sources of energy by recycling and practicing energy efficiency. A key activity of Bill Buster is a before-and-after Energy Survey analyzed with special software. The survey tests students' knowledge of their own energy use and ways to save energy. The software generates personalized energy statements that quantify a student's home energy use and allow a student to look for improvements after starting Bill Buster.

Sources of Sustainability Curriculum



Protect Your Climate Curriculum (free with downloadable request form)

<http://www.seiinc.org/index.php/programs/eco-smart-schools/k-12/item/511-protect-your-climate-curriculum>

The curriculum is composed of hands-on demonstrations, activities, discussions, experiments and take-home assignments designed to engage students in understanding and applying climate change concepts. By integrating science, language arts, and mathematics, the curriculum encourages logic, foresight, and critical thinking, empowering students to make informed decisions and protect the climate.

Student Activities

What's My Footprint?

- Research activity using online calculators for determining individual carbon footprint, ecological footprint and home energy usage

Making a Difference Project

- Student teams use collected and researched data on one topic related to sustainable use of resources (energy, water, transportation, or waste) to create an educational presentation for their school community. Students may write a newspaper article, create a podcast, make a poster or design a 3-dimensional display.