

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

The Future of Renewable Energy and Solar Electric Innovations

Guide for Curriculum Unit 24.04.04, published September 2024 by Jana Jimison

Solar power has a lot of potential for growth because it is an efficient renewable energy source and is better for the environment than conventional power. This unit is designed for middle school students and is intended to get students interested in thinking about the future of renewable energy and creative ways we can collect solar power and use it in our everyday lives. Humans use a lot of energy and most of that energy is created using fossil fuels. It is predicted that the number one problem humanity will face in the next 50 years is an energy crisis. This problem will require advancements in renewable energy technologies and a shift to green energy production. Scientists and engineers are already innovating ways of producing green energy and storing energy produced from renewable sources. This unit includes a hands-on activity using solar cells. Students will build a solar powered car using a toy kit and then race the solar powered cars outside.

(Developed for Gifted and Talented, grades 6-8; recommended for Science and Language Arts, grades 6-8)

https://teachers.yale.edu

©2024 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