

Solar Energy Educational Resources & Experiments for Children and Teens

From <http://www.dteenergy.com/pdfs/solarTeachers.pdf>

For the school-based fundraising campaigns, teachers may want to align lesson plans on solar power to enhance student learning and participation. Here are some curricular resources:

The Nation Energy Education Development (NEED) Project is designed to offer teachers hundreds of resources to educate students on renewable energy sources. The NEED Project offers curricular guides for K-12 teachers in solar power education. Lessons on solar basics, photovoltaics, and school initiated solar projects include both a teacher and a student handbook. Students may also find games, puzzles, activities, and science fair projects. <http://www.need.org/Guides-Subject.php>

Energy for Educators is an online source for lesson plans on renewable energy offered by the Idaho National Laboratory. Lesson plans on solar energy exist for elementary, intermediate, and high school levels. <http://www.energyforeducators.org/lessonplanstopic/solar.shtml>

Energy Kids is a children's website presented by the U.S. Energy Information Administration for the education of kids on energy resources, including a section dedicated to solar power facts, activities, and projects. Teachers will find lesson plans on renewable energy, games and activities, and information suited for students K-12.

Teacher Lesson Plan Resources: <http://tonto.eia.doe.gov/kids/energy.cfm?page=Plans>

Kid's Solar Homepage: <http://tonto.eia.doe.gov/kids/energy.cfm?page=solar>

Alliant Energy Kids offers resources for teachers on renewable energy basics, creating projects and finding lesson plans and activities from online sites. Alliant Energy Kids offers lesson plans on various types of renewable energy, including a page dedicated to solar energy facts and links. <http://www.alliantenergykids.com/EnergyandTheEnvironment/RenewableEnergy/022400>

The U.S. Department of Energy offers a resource guide for teachers to find hundreds of lesson plans on renewable energy. Teachers will find 16 solar energy lesson plans for various age groups. Students may be directed to the kid's website homepage to explore solar energy facts, play games or do activities, and to investigate energy conservation at home.

Lesson Plan Resource Guide: <http://www1.eere.energy.gov/education/lessonplans/>

Kids Website Homepage: <http://www.eere.energy.gov/kids/>

InfinitePower.org, hosted by the Texas State Energy Conservation Office, offers K-12 teachers lesson plans in solar power. <http://www.infinitepower.org/lessonplans.htm>

Energy Quest is a children's website designed to teach kids about energy basics, conservation, renewable energy and more. The site includes a resource list for lesson plans and in-class projects and activities. Teacher Resource Directory: http://energyquest.ca.gov/teachers_resources/documents/RESOURCE_DIRECTORY.PDF

Science Netlinks offers this middle school lesson plan on radiant energy from the sun.

<http://www.sciencenetlinks.com/lessons.php?Grade=6-8&BenchmarkID=8&DocID=14>

Sunsite Funsite is a children's website designed to explain solar energy to kids. Teachers may want to utilize solar activities, glossary of solar terms, and resource links.

Kid's Homepage: <http://www.tucsonelectric.com/Community/EducationalServices/solar/frameset.htm>

Teacher Pages: <http://www.tucsonelectric.com/Community/EducationalServices/solar/resources.html>

Madison Gas and Electric offers lesson plans in solar basics for high school students.

<http://www.mge.com/environment/green/solar/curriculum.htm>

The New Mexico Solar Energy Association offers educational materials for teachers to integrate into solar energy lesson plans. The site offers two sequences of solar energy activities and lessons: one for 3rd-6th grade and a second for 7th-12th grade. Curricular outlines, project ideas and links are available through this website: <http://www.nmsea.org/Curriculum/Listing.htm>

Solar Energy International is dedicated to promoting the development of solar projects. Teachers and students will find information on solar power designed for both younger and older students. Additionally, teachers will find links to more educational resources. <http://www.solarenergy.org/students-and-educators>

Green Planet-Solar Energy is a great resource to find out the basics on solar energy, offering curriculum and experiments for science teachers for all grades. This site offers links to many solar-related sites: <http://www.green-planet-solar-energy.com/>

The Florida Solar Energy Center provides a multitude of educational resources for K-12 teachers in line with the Florida education standards. Curricular lessons and internet resources make this a valuable solar power site: <http://www.fsec.ucf.edu/en/education/k-12/index.htm>

Kids Korner is a children's website dedicated to promoting education on renewable energy resources. Teachers will find lesson plans and activities to use in the classroom on various renewable resources. Kids Solar Page: <http://nespower.apogee.net/kids/?ver=kknespower&utilid=nespower&id=16298>
Solar Energy Activity: <http://nespower.apogee.net/kids/templates/kidskorner/pdf/solarpower.pdf>