



Junior Solar Sprint Northeast News

Northeast Sustainable Energy Association 413-774-6051 x27

Winter 2009



Grand Champions 2008

EDUCATIONAL,
INSPIRATIONAL
and FUN!



US ARMY
Many thanks
to our sponsor



The Winning Difference

Perseverance, resourcefulness, creativity and an orientation to detail are some important qualities that can lead to the development of a winning car. The time and effort shines at northeastern U.S. area events and at the invitation-only annual Northeast Championship! Often a team's first car design doesn't work well. This experience can be an opportunity to re-evaluate, redesign and rebuild — part of the inquiry and engineering process.

Learn more about what to expect with Junior Solar Sprint and how to guide youth through a successful experience. Come to a workshop. You'll also get curriculum resources; a Pitsco kit and chance to build a car; teaching tips; an

opportunity to network, and a professional development letter. Area coordinators often come to answer your questions and offer support. At some workshops, you might even win a door prize, such as a solar panel!

Sign up for a FREE
Winter 2009
Junior Solar Sprint
Workshop Today!

1. Go to www.nesea.org, K-12 Education, Junior Solar Sprint, then "Workshops for Teachers and Leaders 2009" to find the one closest to you.

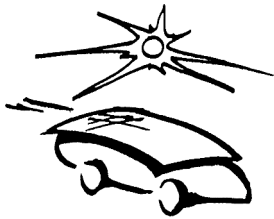
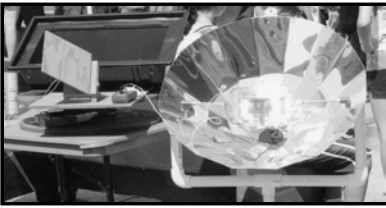
2. Download a registration form & FAX or email us the information.

Solar Panels: PV Applications & More

Once kids see how well a small photovoltaic (PV) panel can generate electricity to power their model cars, they might want to explore some other applications of PV technology. Just what are some uses of photovoltaic technology, besides running cool kids Junior Solar Sprint

cars? You name it! There are exciting and diverse applications for photovoltaic solar energy, from small kids' toys and household goods to rural and emergency electrification systems to grand scale power generating plants. Currently, the world's largest PV (Cont.'d next page.)





Solar Panels: PV Applications (Cont.'d)

power plant is in Spain, rated for 60 megawatts (MW) of power. That translates to enough electricity for roughly 16,000 residential homes. In the U.S., the 280 MW Solana Generation Station Project in Arizona is projected to be running in 2011. Visit www.solanasolar.com to see a photovoltaic solar power project on a grand scale and explore more potential for PV at the web site of the International Energy Agency – Photovoltaic Power Systems Programme (IEA-PVPS), which promotes international collaboration to develop and implement photovoltaic solar energy: <http://www.pvresources.com>

Ideas for the classroom & beyond:

Interview some people who use electricity from photovoltaic cells, or who heat water or air with passive solar energy. Kids can learn how to distinguish photovoltaics from other forms of solar technology, and then take a scavenger hunt around the community looking for different types of solar power and different applications of photovoltaic cells, visiting a site if possible. They can search the web to find as many applications as possible and create a group poster. With a quality educational PV kit, they can try out some activities. Thames & Kosmos is among those who offer one, or go to www.schoolpowernaturally.org and click on Solar Kits where you will find 15 solar lessons and tips on how to find materials.

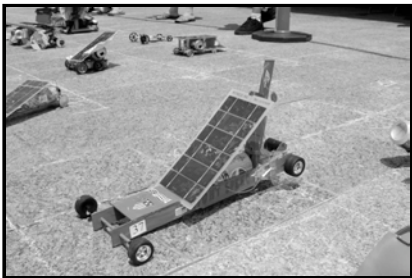
At NESEA's Clean Green Power Program, you will find a guide rich



in resources: interview questions for your guest or site visit; distinctions between solar hot water collectors & PV panels to help with your solar energy scavenger hunt; a quiz and a survey on renewable energy; renewable energy glossaries with web links; project ideas for kids of all ages, and an opportunity to get the whole family up to date on renewable energy. Kids as young as 5 can earn the Clean Green Power Champion patch & certificate together with their Junior Solar Sprint siblings, and there are special patches for Girl Scouts. Go to our web site and follow K-12 Education links to the program.



SPRINT INSPIRATION GALLERY



The Championship 2008 was held at the Springfield Quadrangle for the 7th year in a row, organized by the Northeast Sustainable Energy Association and funded by the US Army.



**Save the date!
Northeast
Championship
Sun., June 14, 2009**

Sun & clouds kept competitors on their toes with cars running on either battery packs or photovoltaic solar energy according to the call of the track master. The cars you see in this gallery offer a sampling of the amazing array brought to the Championship from around the northeastern USA. The teams of middle schoolers who created them qualified through competition in one of the 20 or so area events around the Northeast that took place in May and early June. They were invited to show their best in speed, and several design categories. Separate judges reviewed the quality of solar collection, the power train, the wheel and guidance system, craftsmanship and innovation. Kids voted for favorite cars besides their own for the Kids Choice Award. Awards for Best Use of Recycled Materials and a new award for Artistic Merit were also offered. Go online to www.nesea.org to see color images of the top winners representing New Jersey, Vermont, Maine, Delaware, Massachusetts, Connecticut, and Pennsylvania this year and their fabulous cars!





Teacher Tip: Follow the Rules!

Aiming for the Championship? Make sure kids are familiar with the JSS Rules and Regulations 2009 on our web site. The rules can be presented as engineering specifications for the project. There are two suppliers for the official JSS motors and panels:

Solar World: 800-246-7012
<http://www.solarworld.com>



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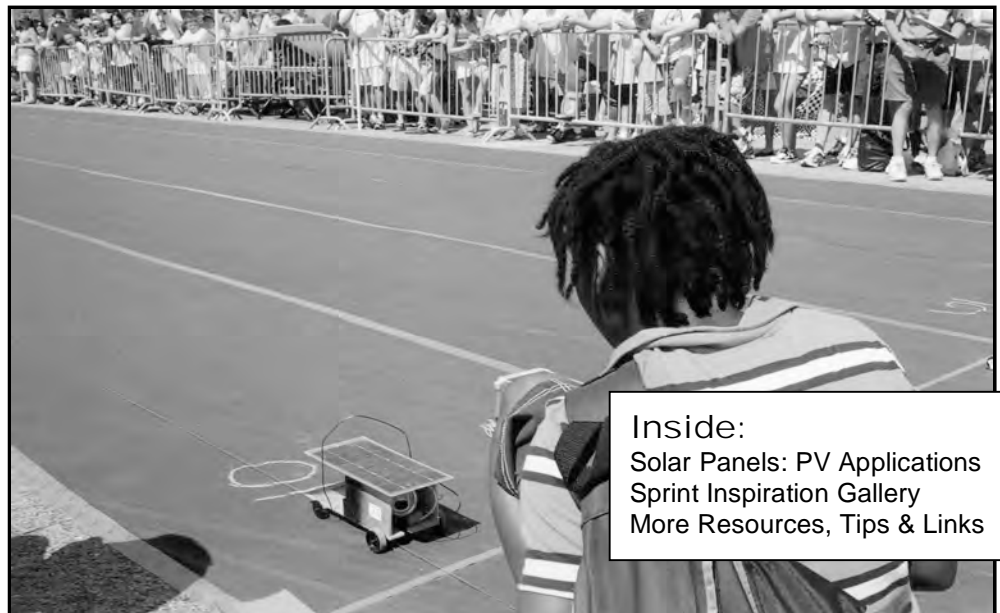
Pitsco: www.shop-pitsco.com
Type Junior Solar Sprint in the search menu 800-835-0686

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Visit the web:
www.nesea.org and
go to K-12 Education
Junior Solar Sprint



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