

TEAM INFO SHEET:

SOLAR HOUSE DESIGN CHALLENGE

The goal of the Solar House Challenge is to build a small house that is powered by the sun! Your final score depends on the thoughtful, creative, and resourceful design of your house; the innovation and complexity of your circuitry; and a thorough reflection on the process of building your house. As there are no qualitative scoring points for these criteria, judging will be based off of a comparative analysis of submissions for the month.

Team Info

Team name (do not use your real names): _____

Grade level: K-4th grade 5th-8th grade 9th-12th grade College+

Coach's name: _____

Coach's email: _____

School or organization: _____

Tell us about your team (do not use your real names): _____

Basic Information

City: _____ State: _____ Country: _____

Solar House Information

What is your light source? _____

Describe the solar panel(s) you are using

Solar panel type(s) used: Monocrystalline Polycrystalline Thin film

Total number of panels: _____

Rated voltage (V) of a single solar panel (this is usually on the back of the panel or on the packaging): _____

Rated amperage (mA) of a single solar panel (this is usually on the back of the panel or on the packaging): _____

You will need to upload a photo of your solar house. Do not include your faces in the photos. Make sure that the file is less than 100MB, and is in .png, .gif, .jpg, or .jpeg format.

What were your design goals? Tell us about the features in your house: _____

What were some of the challenges you faces, and how did you solve them? _____

Solar House Circuit

Describe the loads you are using in your circuit. Plug in the type and number of loads you used in the chart below. If there are additional loads than what is included on the list, enter your own line items. If you did not use loads already on the list, enter "0" as quantity.

Load type	Quantity used
LED Christmas light	
Incandescent Christmas light	
Motor	
Buzzer	

Total number of loads: _____

Describe the switches you are using in your circuit

Describe the types of switches you used and what they're connected to: _____

Number of switches used: _____

You will be prompted to upload a circuit schematic. Draw a schematic of your circuit out on a piece of paper or remove your circuit from your house, laying it flat, and take a photo against a light-colored background. This should illustrate inputs, outputs, power source, and circuit layout. This allows us to see how your circuit functions fully, since we can't see the whole thing in your house! Make sure that the file is less that 100MB, and is in .png, .gif, .jpg, or .jpeg format.