

Building the year 6 model solar house

Model Solar PV System Challenge



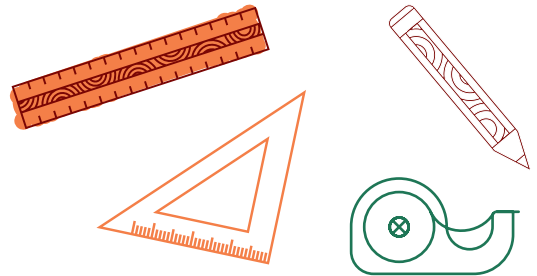
Design and build an approximately 3.3 W rooftop or free-standing solar PV system using the Horizon Power Bright Horizons mini solar PV panels.

CONSTRUCTION GUIDELINES

In order to keep the competition fair, the following rules apply to construction of the solar house / community models.

Only the **Standard kit parts** are to be used.

The solar panels provided in the Bright Horizons kit must be used and cannot be swapped with different solar panels.



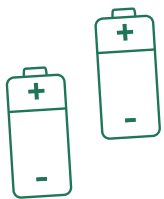
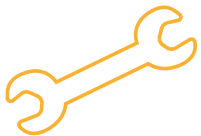
Approved additional construction materials and modifications:

- Material to help angle the solar panel such as foam, cardboard or balsa wood;
- Alternative self-designed house frames and material;
- Additional house circuitry.



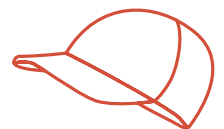
Your Model must:

- Use the included model house cardboard template;
- Be constructed correctly, with the model house sturdy when freestanding;
- Include an approximately 3.3 W rooftop or free-standing solar PV system;
- Include an electrical circuit:
 - connecting the solar system to the house
 - with a switch and globe
 - with a separate battery pack circuit
- Your school name on the house.



Designing the model house

1. Students work in teams of 2-4 members, to build a model 3.3 W rooftop or free-standing solar PV system.
2. Students decorate and use their creative skills to design a unique house.
3. Students are able to connect a device like a globe outside the house, or cut out the doors and windows and have the globe inside the house.



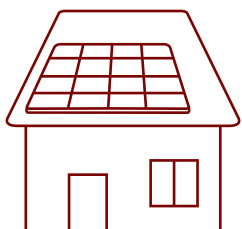
Safety information

- You will be in the sun for these activities so make sure you wear your hat and sunscreen.
- Follow all safety instructions when using cutting tools such as scissors.
- Solar panels are fragile - handle them with care. They will break if dropped.
- Keep the panels covered away from fluorescent globes and other sources of light until you are ready to use them. They deteriorate with excess exposure and over time.



Judging the best model house

- Hold an event or identify a display location where students and teachers can view each house;
- Use a ballot (secret or similar) for students and teachers to vote for the house they like most.



Share your student's model houses at horizonpower.com.au/brighthorizons



APPROVED ARTWORK SIGN OFF

HOPOPW0043_Solar_House_Instruction_A4_Sheet_FA1

Client	HORIZONS
Job Number	HOPOPW0043
Date	10/08/21
Version	FA

Please check and initial your internal approval:

Engagement Team	<input type="text"/>	any changes
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Copy	<input type="text"/>	any changes
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Design/ Art Direction	<input type="text"/>	any changes
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Producer	<input type="text"/>	any changes
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Studio	<input type="text"/>
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**+ WUNDERMAN
THOMPSON**