



How Does a Solar Panel Make Electricity?

Vern, Broccoli Man, and a sunny surprise

A SprigKids science story





The spinner stopped.

Broccoli Man shaded the little solar panel. The yellow spinner slowed, then stopped. "No sun, no spin?" Vern wondered.



Vern's prediction.

"Maybe the panel stores sunlight inside," Vern said. "Then it could save some for later!" Broccoli Man listened and raised one leafy arm. "Let's test that idea."



Face the light.

They connected two insulated leads from the panel to a tiny motor. Then they turned the panel toward the bright window.



A surprise!

The spinner began to turn. There was no battery inside the panel. Sunlight was the input.



Vern revises his idea.

"The panel does not store sunlight," Vern said. "Light gives energy to tiny moving charges inside the solar cells. That makes an electric current."



Try it safely.

With a grown-up, connect a small low-voltage solar panel to its matching motor. In sunlight, watch the spinner. Shade the panel with a card, then uncover it. Keep the leads insulated. Never use a wall outlet.

Grown-up note: Use only a classroom solar kit with its matching motor. Do not connect the panel to a wall outlet or add batteries unless the kit instructions specifically call for them. Keep fingers, hair, and loose clothing away from the spinner.



Remember the sunlight's journey.

Sunlight brings energy to the panel.

Solar cells turn some light energy into electricity.

Insulated leads carry the current to the motor.

The motor changes electrical energy into motion.

A battery can store energy; a panel makes it when light arrives.