

Nature's Power

Renewable Energy in Action



Mirror Walk

Aim of activity

Understanding specific angles required for solar PV panels

Equipment needed

- small mirrors
- pictures of solar PV/solar cell kits/working solar PV

Instructions

At a solar PV site, or using images and solar cell kits, ask children to talk with a partner about what they know/notice about the position of the panels in relation to the sun. Prompting with questions like, what do you know about the pathway of the sun? Why might the panels be pitched at this an angle?



Choose a route directed toward the sun for safety. Give out the mirrors, explaining that this activity demonstrates how different angles change what is reflected in the mirror for us to see. Their job is to find the best angles for seeing the most. Speak to the safety issue of making sure they don't angle the mirrors toward the sun. This will be one of the jobs of the safety partner.

Children work with a partner. One walks with the mirror positioned on the bridge of their nose so they can play with angles to get the best view of whatever is above them (trees / clouds) while the other, the safety partner, keeps their partner safe from falling or bumping into anything and from tipping the mirror toward the sun.

Discuss what they were able to see on their journey. Explain that for the solar PV to work most efficiently it needs to be positioned to get the most light for most of the time. Ideally the panels would constantly adjust, just as their mirrors did but for practical reasons it is placed in the best stationary position possible.