

Solar energy

Energy from the Sun is called solar energy. It reaches us in the form of heat and light. Solar energy is the reason for the existence of life on Earth. Without it plants would not grow, and animals would starve. Scientists are exploring ways of harnessing solar energy for uses such as powering engines and heating homes in cold weather.



See how solar energy can cook food

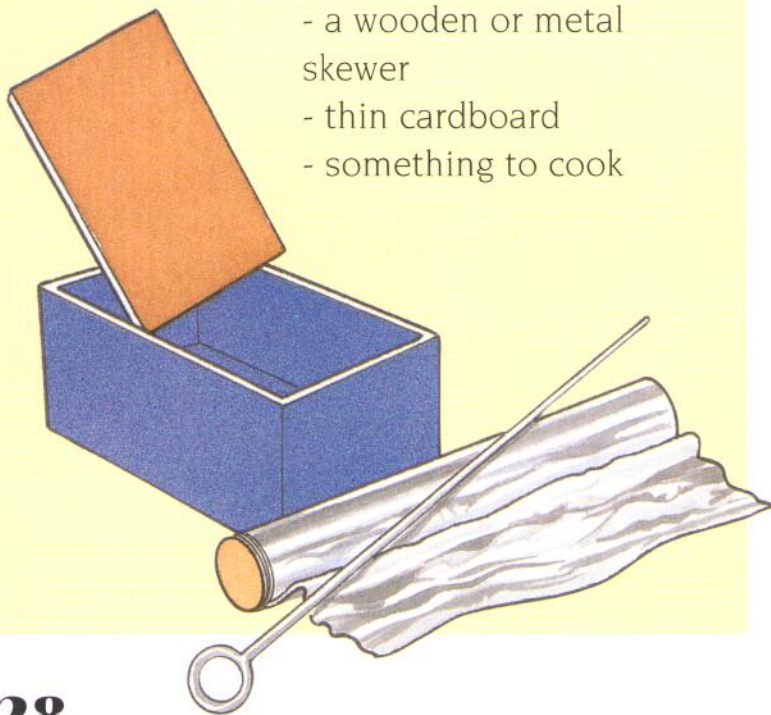


METHOD NOTES

Choose something that won't take too long to cook—marshmallows are perfect.

Materials

- a shoe box
- aluminum foil
- a wooden or metal skewer
- thin cardboard
- something to cook



1. Cut the shoe box into the shape shown in Figure 1, and make a hole in the center of the raised flaps.
2. Cut out a piece of cardboard to fit over the opening of the box (but not the flaps) and cover it with foil—shiny side outward (Figure 2).

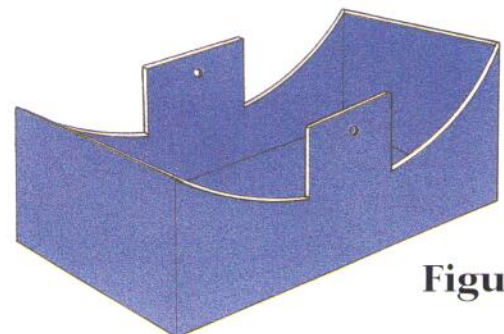


Figure 1

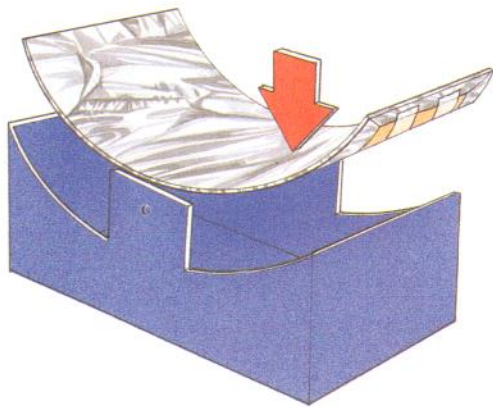


Figure 2

3. Tape the cardboard onto the box.
4. Thread your skewer through one hole, put some food on your skewer, then thread the skewer through the other hole (Figure 3).
6. Place your solar oven in the Sun and leave your food to cook.

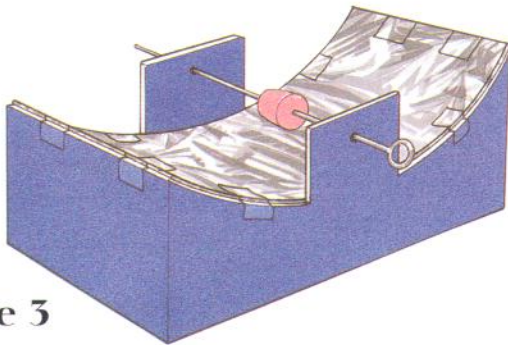
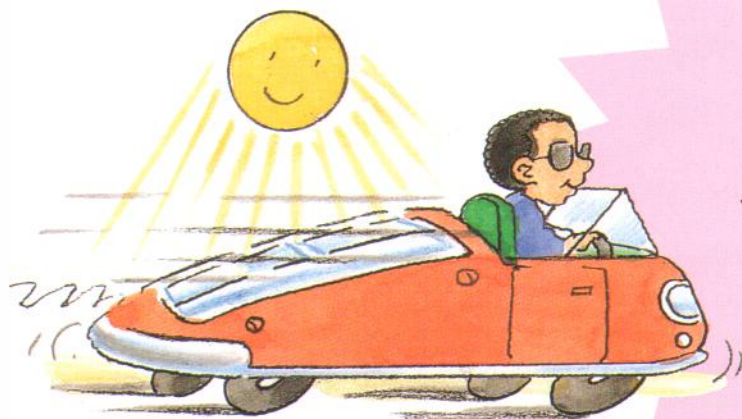
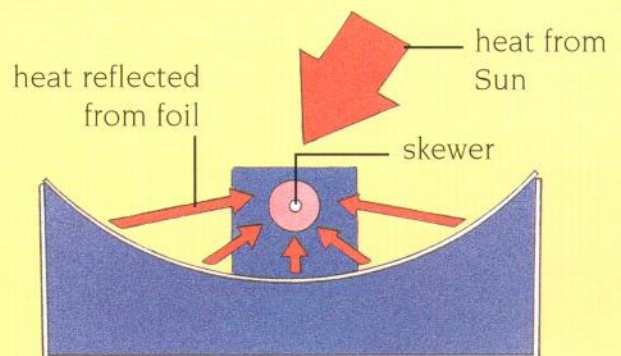


Figure 3

WHY IT WORKS

The Sun's rays are very powerful and contain a lot of energy. The foil reflects these rays like a mirror. Because of the way the cardboard is curved, the foil concentrates the rays onto the food you are cooking. The heat warms the food, and after a while, cooks it all the way through to the middle.



Speed from the Sun!

Solar-powered cars use the energy of the Sun, using solar cells to collect and store energy. Some of these cars have traveled 1,860 miles (3,000 km) across Australia using only the power of the Sun!