

ACTIVITY 1

In this activity, you'll build a reflective box that will be used as a solar oven.

LET'S MAKE

GATHER YOUR SUPPLIES

INCLUDED

SOLAR OVEN KIT



NOT INCLUDED

GLUE STICK



TRANSPARENT TAPE



SCISSORS

BALLPOINT PEN



RULER



MAKE THE REFLECTOR BOX



STEP 1

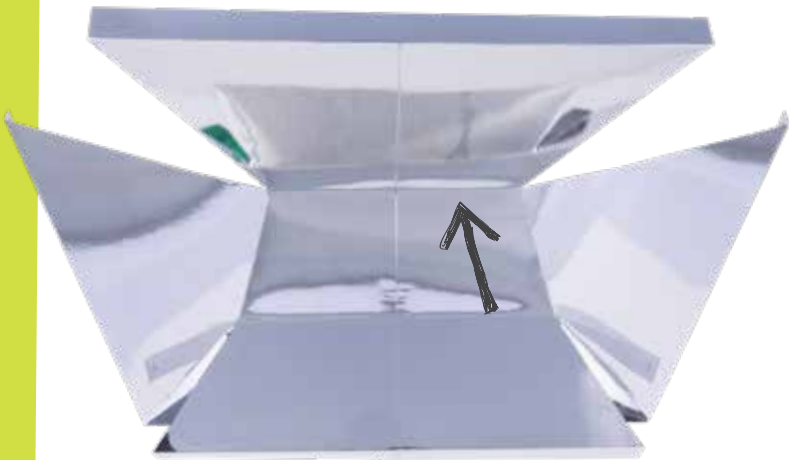
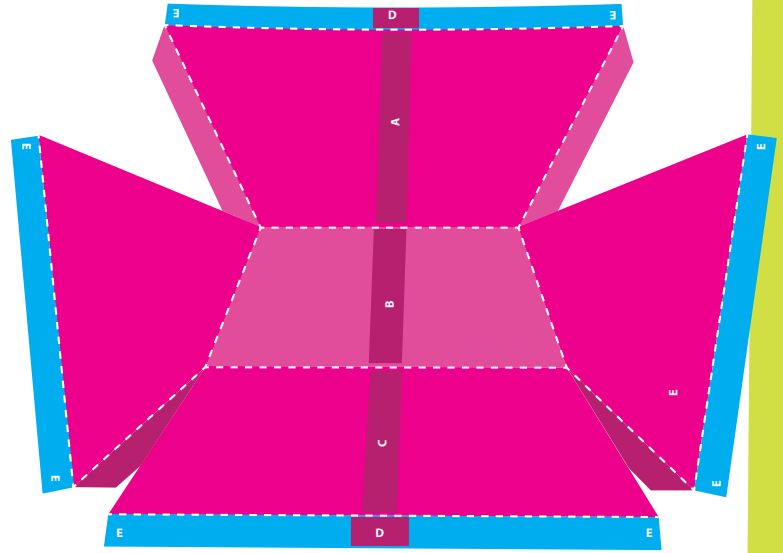
Open your Solar Oven Kit and remove the pieces. Find the two sheets that have a **reflective** surface on one side and a pattern on the other. Place the other components aside for later.



A reflective surface causes light to bounce off a surface – such as a mirror. Often, these surfaces are described as “shiny.”

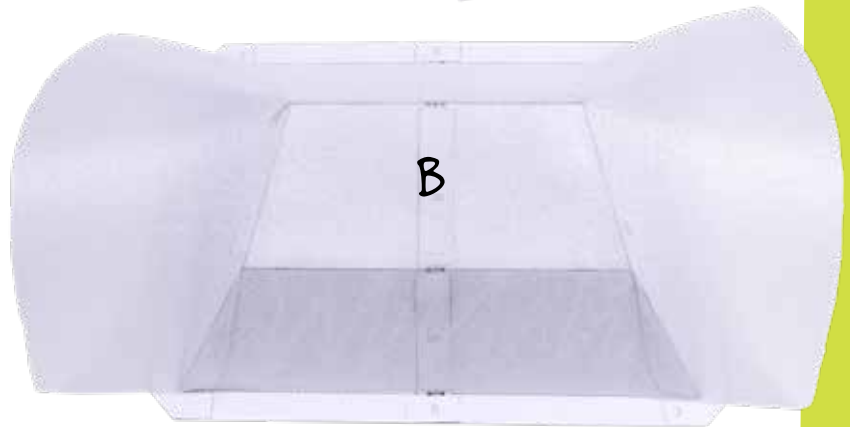
STEP 2

Follow the instructions in the user guide to make your reflector box. Depending on the kind of glue you use, it might not stick very well on the slick material. If it's not sticking, use tape to hold the pieces in place.



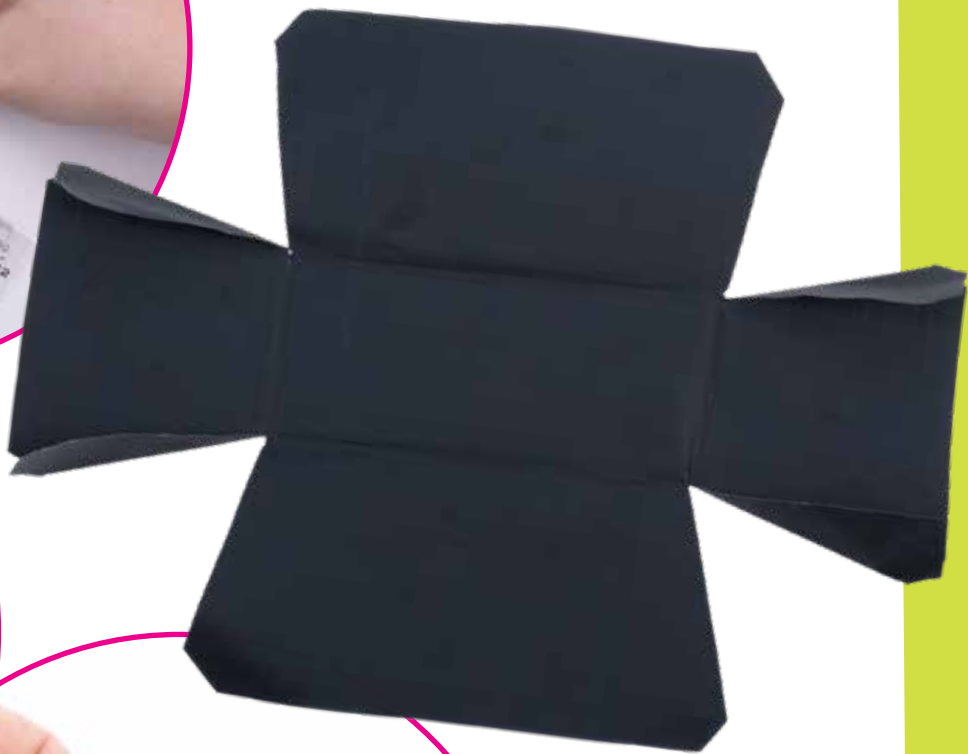
STEP 3

We want to insulate the outside (the white part) of the solar oven. This will help keep the heat trapped inside, making your objects melt faster! The user guide shows one way to cover the back of your oven with the thin foam. You can try this way, or you can figure it out yourself!



STEP 4

While the reflective box of the solar oven will do a great job of trapping heat in the area, your project might need a little more help. Let's make a small oven box to speed up the cooking process! Follow the directions in the user guide.



CONGRATS!

You have completed the construction of your solar oven! Way to go! You'll use it in the next two activities, so keep it in a safe place until you're ready to move on.



THINK ABOUT IT

How do you think the solar oven will work? How will it use the Sun's energy to melt objects?

Compare solar ovens to the oven you use in your home. How are they the same? Different?

