

Build A Model Solar Probe

Discover the Parker Solar Probe and embark on a mission to the Sun!

Materials Needed:

Instrument Shapes printable (or draw your own), toilet paper tube, thin cardboard (from a cereal box or similar packaging), glue, tape, scissors, aluminum foil, crayons.

Instructions:

Prepare your supplies ahead of time. Print and glue the instrument shapes onto thin cardboard to make them sturdy. Cut each shape out.



Set the stage! Explain that you are going to explore the Sun.

The Sun is too hot, but we can send a space craft called a solar probe! Our solar probe will have tools to tell us about the Sun. Are you ready to build?

Step 1: Color each instrument shape.

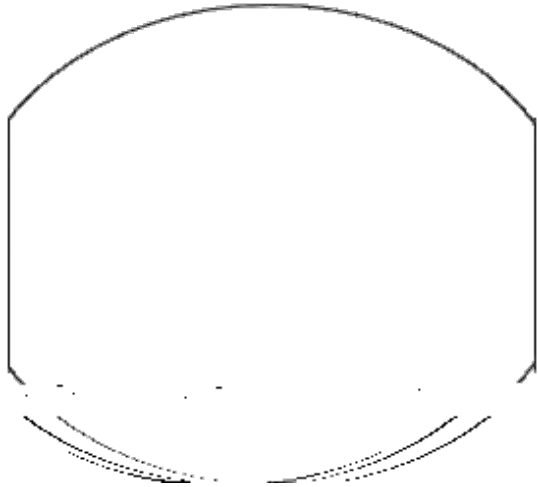
Step 2: Tape the solar panels to the straight edges of the protective shield. Tape or glue four of the long thin rectangular probes to the back of the protective shield, one on each corner (see pictures).

Step 3: Tape the protective shield on one edge of the tube. Tape the last long thin rectangle on the other edge of the tube. How many mysteries will your probe explore?

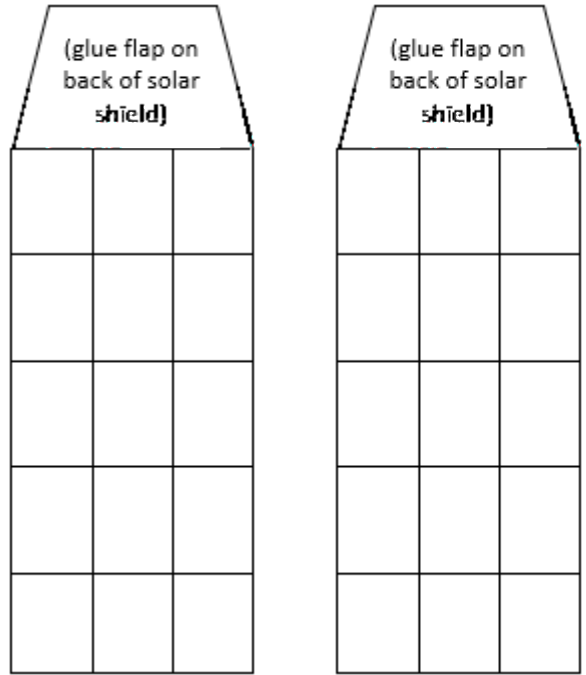
Solar Probe Instrument Shapes Printable

These shapes represent just a few of the features and instruments on the Parker Solar Probe.

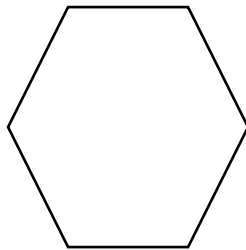
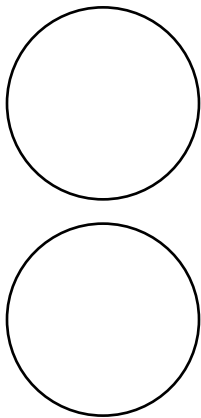
The protective shield protects the spacecraft from the heat of the Sun.



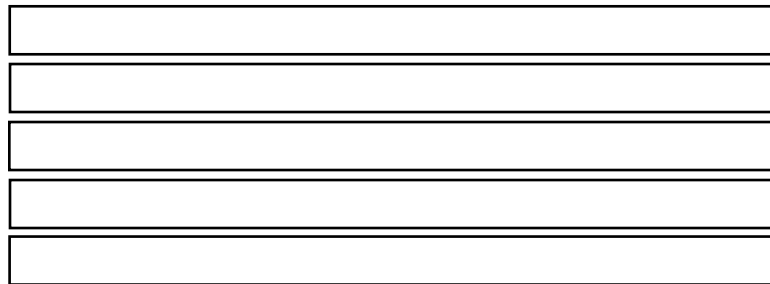
Solar panels absorb the Sun's energy to power the spacecraft.



SWEAP instruments measure the solar wind. The ISOIS instrument measures solar energy.



The WISPR telescopes take pictures.



The FIELDS probes measure magnetic and electric energy.

Discover more about the Parker Solar Probe:
parkersolarprobe.jhuapl.edu

Exploring The Sun From Far Away

The Sun (also called Sol) is the star at the center of our Solar System. Its gravity holds the solar system