

# Build A Model Solar Probe

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

People can't travel to the Sun because it 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?

## 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.

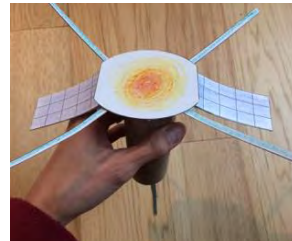


## Instructions:

**Step 1:** Color each instrument shape. Glue them to thin cardboard to make them sturdy, then cut each one out.



**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).

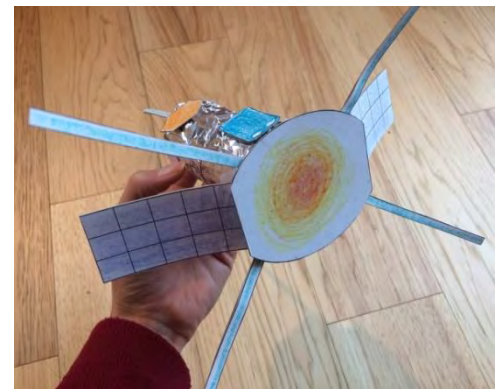


**Step 3:** Tape the protective shield on one edge of the tube. Tape the last long thin rectangle on the other end of the tube.

**Step 4:** Cover the tube in foil. This protects the electronic instruments from solar radiation.

**Step 5:** Glue or tape the rest of the instruments around the tube: the small rectangle is a telescope, and the hexagon and circle are instruments to measure the solar wind.

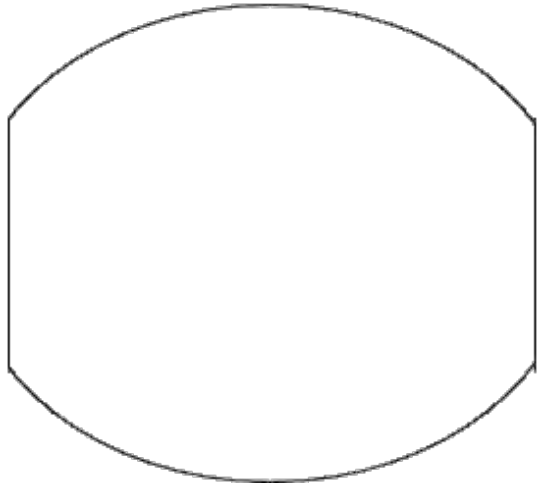
**Step 6:** Add more features to your solar probe! What do you wonder about the Sun? What mysteries will your probe explore?



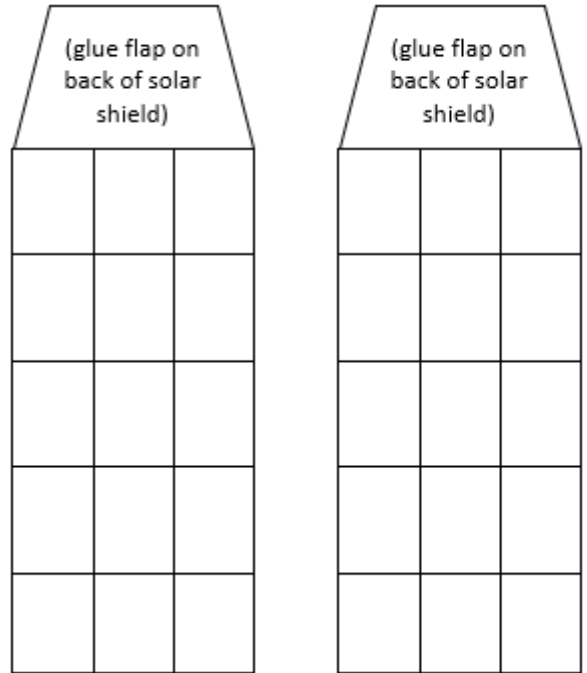
## Solar Probe Instrument Shapes Printable

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

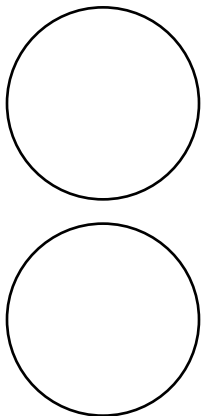
The **protective shield** protects the spacecraft from the heat of the Sun.



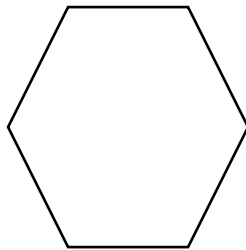
**Solar panels** absorb the Sun's energy to power the spacecraft.



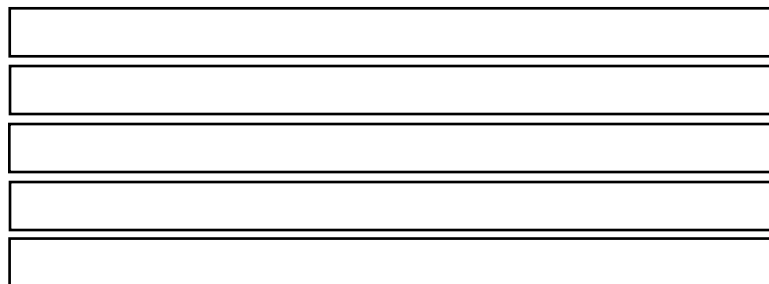
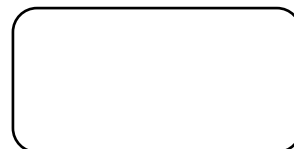
**SWEAP** instruments measure the solar wind.



The **ISOIS** instrument measures solar energy.



The **WISPR** telescopes take pictures of the sun's corona.



The **FIELDS** probes measure magnetic and electric energy.



Artist's conception of the Parker Solar Probe. Image: NASA.

Discover more about the Parker Solar Probe:

[parkersolarprobe.jhuapl.edu](http://parkersolarprobe.jhuapl.edu)