

Jacoby Bengler  
*Solar Charger*

Is it possible to design and construct a solar powered cellular phone charger? I do believe it is possible to build a working solar phone charger. I decided to use a Photovoltaic for my project. These Photovoltaic Cells use materials called semiconductors. Silicon is the semiconductor in my solar panel. The process starts when the light strikes the panel. A portion is absorbed into the silicon and knocks the electrons loose which allows them to move freely. These cells also have at least one electric field that forces all of the electrons in one direction. This forms a current which is attracted to metal contacts at the top of the panel and then drawn off for external use. Phones charge at about 5-7 watts which is perfect for a small cell. Take the solar panel and locate the positive and negative power outputs. Now take the female USB cable and cut it in half, then strip down the positive and negative wires and connect to the solar cell. After all of that is set up, plug in your USB cellular phone or other USB based charging cable. And set in the light. After all of my designing and experimentation I completed my goal of constructing a solar powered phone charger and prove my hypothesis correct. I placed a light source on the solar panel and when I plugged it in, I was able to charge my phone.