

# On The Go: A Solar Power Heater Kit

Pope, Jordan

Solar energy is radiant light and heat from the Sun that can be harnessed using technologies such as solar heating, photovoltaics, solar thermal energy and solar architecture. These technologies can be used to harness the sun's energy and make it useable. This research is based on the events that take place when power outages occur people look for means to get heat and electricity. If the "On the Go: A Solar Power Heater Kit" is available, then a safe choice can be made using the sun's energy as a heat source or to use solar energy to restore batteries.

**Specific Questions** Will solar cells enhance the generation of electrical energy from the sun? Can solar panels be stacked to generate electricity from sunlight?

**Hypothesis:** If more solar cells can be stacked in circuit formation then more electricity can be generated.

**Method:** Conduct a Comparative study, to illustrate the stacking of the solar cells in the kit model. Use voltage to quantify how efficient the stacking of the solar cells model is; record the temperature readings inside the models over time.

**Expected Results:** Temperature will rise until equilibrium when temperature is attained. This is where the temperature will remain constant. The amount of voltage that can be converted from the solar cell depends on the highest temperature reach. To optimize the amount of voltage will be the greater number of solar cells electronically stacked.

**Conclusion:** The more solar panels used in the models, the more electricity can be generated from the models. This can be shown by the increasing potential differences /voltage across the negative and positive terminal of the rechargeable battery.