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*The "Light" of Our Lives*

As a teenager I am very interested in our economy. Every day I am learning more about recycling, renewable energy and ways to make our world a better place. When Alamosa High School invested in solar panels for energy in their school, I got an inspiration for a great project. I interviewed a science teacher who has his house powered partly from solar panels. He suggested I test photovoltaic panels, which change sunlight directly into voltage energy. I wanted to determine if I could make them more efficient. The science teacher gave me five photovoltaic panels. Next, I gathered materials including a mirror, fiber optics, potting soil, and a magnifying glass. I tested this project under sunlight and also under a controlled light. I used a 500 watt halogen light and tested the panels with each material on them three times. The mirror tested panel gave the best results followed by the regular panel, then the fiber optic panel followed and the least efficient panel tested was potting soil. I later set the panels at a 45° angle and tested them on three separate days. All three days were sunny with minimum clouds. The results were similar with the mirror tested panel being most efficient and potting soil measuring 1.37 vdc less. These results support placing a mirror on Photovoltaic panels to improve efficiency. I feel I can help improve the economy by this shall step. The sunlight is free and solar panels are our future.