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*Solar Solution! How Does the Angle of the Sun Affect a Solar Panel?*

This experiment was designed to see how the angle of the sun affects a solar panel. A solar panel is a device that converts the sun's energy into electricity. I hypothesized that the solar panel would produce the most power when it was directly facing the sun, at noon. I predicted that the solar panel would have the least amount of microamps generated at 9:00 AM, as the sun would not be facing the solar cell as directly. To do my experiment, I made a solar panel from cuprous oxide. Cuprous oxide is a semiconductor, meaning its electrical conductance is between that of an insulator and a conductor. After the solar panel was made, I recorded how many microamps were produced every hour from 9:00 AM until 3:00 PM. On average, the most power was produced at 1:00 PM. However the amount of microamps produced at noon was extremely close. Based on my results, I concluded that my hypothesis was correct in saying that the least amount of power would be produced at 9:00 AM. However, in saying that the most power would be produced at noon was incorrect. If I could do this project again, I would do more than eight trials and have the trials closer together.