

My Solar Garden

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The Purpose of this project is to design, build, and test the most efficient miniature greenhouse. In order to build this I needed to cut four eight foot pieces of one by two inch lumber, two sheets of acrylic glass, and soft plastic to desired specifications. The next step is to build the outer cabinet using wood glue, and pneumatic nails. Then the shelves have to be installed using the same methods. One quarter inch dowel wood must be cut to fit desired dimensions in order to fit the second and third shelves. The electrical is the next item to be installed. To do so insert a 12 volt battery, thermostat, two toggle switches, copper wire, LED lights, solar panel, and computer fans in the desired way. Finally set up the watering system, insert the micro tubing, water container, pump and solar panel inside the structure. After the building of the structure was complete, I planted Genovese Basil to test. All of the plants that sprouted did so faster than the average germination time for the species as a whole. Of the plants that germinated, the average growing time was 4.1 days. This is compared to the average which is 8 days.

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