Indoor Hydroponic gardening, the cheap way !

Hydroponic gardening is a great way in which plants can be grown and cultivated with yields far superior to those of traditional soil based culture. However, the last frontier of hydroponics remains being indoor growing. Light, which we take for granted because of the sun, is a crucial factor for plant growth and becomes dramatically diminished or non existent inside our house's or building's interiors.
The solution, of course, is using artificial lighting to grow our crops. Unfortunately, the amount of light needed by plants (which is measured in Lumens) is quiet high. In order to fulfill a plant's light needs, high power consuming artificial lights must be used. In fact, most indoor growers use halide lamps which are in the range of 1000 to 2000 watts of power.
The amount of energy consumed by these growing lights is so huge because most of the energy provided to the lights is wasted as heat and little of this energy becomes usable to the plant as light. Other problems also arise because of the excess heat eliminated by this high-powered illumination devices.

The solution for this problem is actually very simple. The use of LEDs (light emitting diodes) for hydroponic growth has become popular because of their low energy consumption (almost 20 times less than regular growing lights). They are simple to install and provide all the necessary wavelengths your plants need for adequate growth. For instance, two tomato plants can be grown with as little as 50 W of growing LEDs while this same tomatoes would consume in excess of 1200 W with traditional lighting. If you are wondering where these lights can be purchased, just search ebay for "growing LED's" and a bunch of sellers that offer these products will come up.