**Activity 4.1.1 Inverse Square Law of Light**

We know a street light gets dimmer  the farther we walk away from it and we all know when we walk away from a camp fire it seems to get dark really quickly.  How much dimmer is it getting as we move away? This lab will let us answer that question with a mathematical model that differs from ones we have met earlier in this course.

**What You Need:**

* Must have a point source of light for this activity. **A Mini-Maglite™ flashlight** will accomplish this. (Or make your own light source see instructions at <http://www.nasa.gov/pdf/583137main_Inverse_Square_Law_of_Light.pdf> or

[**https://www.cfa.harvard.edu/seuforum/mtu/MTUinversesquare.pdf**](https://www.cfa.harvard.edu/seuforum/mtu/MTUinversesquare.pdf))

* **Centimeter ruler**
* **Calculator and Graph paper (master provided)**
* **Data Table (master provided)**
* **Box --- see Teachers Notes**

**Procedure:**

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