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### *Photon's Affect On Spacetime Curvature*

The purpose of this experiment is to further my understanding of physics, the four categories that make up physics, and how they affect each other. The procedure used in this experiment consists of ten steps. 1. build required contraption 2. record time taken for the primary and secondary masses to reach each other without an electromagnetic field 3. repeat step two ten times 4. find an average for the recorded times 5. create six different plans in which you will involve electromagnetism 6. record the time taken for primary and secondary masses to reach each other with an electromagnetic field 7. repeat step six for each six EM (electromagnetism) involvement plans 8. find averages for the recorded times consisting of ten samples for each EM plan 9. compare each EM average with the control test average 10. determine an overall result for the affect that includes all plans (if no plans had an affect, you would declare "no affect". If 3 plans had an affect and 3 did not, you would state "further research needed". If all 6 plans had an affect, state "affect". The final results showed up and were graphed. Only 2 of the six EM plans showed an affect with the mass rate. For those two, I declared an affect, but for the overall results I will need to proceed with further research on the 2 EM plans. For plans #1, 2, 3 and 6 the results had no affect. This experiment was supposed to be done in a basement where there would be no wind or field oscillations. Therefore, the results could be a lot more accurate than they are now. I am planning on doing another experiment with the same contraption I used in this one, but it will consist of a different problem. The contraption I used in this experiment is ideal for the physics projects I do, so I'm probably going to use it a lot more in the future. Though the best conditions for the contraption are in basements, and if I don't use basements for the location of my projects, my results will not be accurate and I have a feeling that that is what happened to this experiment. The data I collected was affected from either wind or other gravitational forces. This experiment will be improved in the future and more accurate data will be collected. But for now there is most likely no direct affect between electromagnetism and gravitational forces.