Task

Some scientists want to confirm their hypothesis about the gravity conditions of planet Viesto-11b, that was discovered during the Viesto 11 mission. When astronauts land on Viesto-11b, the scientists would like from them to run a quick experiment concerning a pendulum to measure the gravity conditions of Viesto-11b. Unfortunately, the scientists are so used to using more advanced math for other experiments that they have forgotten about the basic features of pendulums. While they prepare for the upcoming Viesto 12 mission, they have asked you, as the newest recruit, to give them a brief reminder as to how pendulums work and move in practice since you have most certainly seen them most recently.

Your goal is to provide the scientists with enough data to help them to understand how pendulums work and move in practice. You are expected to include any observations of your data collection, and any inferences you can immediately make from the data. We'll leave the rest of the physics to the scientists.

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| Requirements: | Comments: |
| Collect pertinent data concerning the motion of your pendulum. This includes but is not limited to, position, velocity, and/or acceleration. Both the horizontal and vertical directions were considered.  **20 Points** |  |
| Include any observations of your data collection. A brief description of how the data was collected is included.  **10 Points** |  |
| Run an *appropriate* regression analysis of the data. The equation and statistical strength of the regression are mentioned.  **25 Points** |  |
| Make inferences from your regression analysis. You used your regression to infer other physical qualities of the pendulum or you used more data to establish some relationship.  **35 Points** |  |
| The data is clearly organized and understandable. Your observations are stated in clear and complete sentences. Your regression equation is clearly identifiable. Your inferences are reasonable.  **10 Points** |  |