

RGM Measurements and Reflection

Physical Science and Technology

In a Microsoft Word document, answer the following questions. This is an individual assignment. BEFORE you print your work, have an instructor look it over. Make sure your name is on your paper before you print and turn it in!

1. Use the Excel template to enter your data and convert units. Calculate the average values for all five trials. Copy and paste the spreadsheet into your Word document.
2. Did your Rube Goldberg Machine function so that a smaller mass could be used to lift a larger mass? EXPLAIN how this can happen.*
3. According to the information we discussed about simple machines, if a machine is used to increase a force, the smaller force must be moved over a larger distance. Is this what you saw in your Rube Goldberg Machine? (In other words, did the smaller mass have a larger average displacement than the larger mass?)
4. How could you design a Rube Goldberg Machine (or any series of connected simple machines) so that a smaller mass could lift a larger mass WITHOUT moving a greater distance? (Hint – think about how you could use the smaller mass to trigger the movement of other objects.)*

*Questions with an asterisk should be answered in paragraphs of at least 3-5 complete sentences.