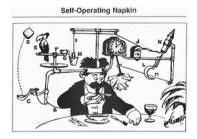
Rube Goldberg Machine Challenge (Mechanical Advantage) AENG 101 Introduction to Engineering Dr. John Wright

A **Rube Goldberg machine**, named after American cartoonist <u>Rube Goldberg</u>, is a machine intentionally designed to perform a simple task in an indirect and overly complicated way. Usually, these machines consist of a series of simple unrelated devices; the action of each triggers the initiation of the next, eventually resulting in achieving a stated goal. <u>https://en.wikipedia.org/wiki/Rube_Goldberg_machine</u>



Directions: You are to develop a Rube Goldberg machine (outside of class) that incorporates the following simple machines (required elements) in the machine's design:

Lever	10pts
Wheel and Axle	10pts
Inclined Plane	10pts
Wedge	10pts
Screw	10pts
Pulley	10pts

Further, the machine should be complex. The more complex, the better! Part of the evaluation will be tied to the number of <u>unique</u> individual elements as follows:

6-10 elements	10pts
11-15 elements	20pts
16-20 elements	30pts
21-25 elements	40pts

Your simple task is to ring the bell provided by the course instructor. Each person must video their Rube Goldberg Machine successfully ringing the bell. <u>The video is not to be edited and one take is required</u>. Each person will present the video to the entire class using a PowerPoint presentation with the following required slides:

- Title Slide
 - Name of Your RG Machine
 - Your Name
- Elements

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- Pictures of one example of each simple machine used (max 6 total pics required elements)
 - Total # of unique elements (different steps)
 - Develop a Which Statement to determine #
- Video*
 - Embedded or YouTube link is acceptable in PPT
 - Video may not be edited and must be a single take



*Note: Video is required for evaluation. 3.3inch Points may be reduced should you not complete the PPT as described above.