

Task clarification:

The goal for 2009 is to replace an incandescent bulb with an alternative, relatively more efficient, light emitting device. Within the execution of the machine, it is *encouraged* to demonstrate within some step that the incandescent light bulb does indeed work. Though it is encouraged to show the incandescent bulb lights up, it is not required.

The actual replacement of the incandescent bulb has intentionally been left to broad interpretation. The standard interpretation involves unscrewing the incandescent bulb and screwing in a fluorescent bulb. A not so standard, but equally acceptable interpretation could involve switching off an incandescent bulb and switching on an array of LEDs. There must be, in some form or another, an emission of light from whatever has replaced the incandescent bulb for the task to be considered completed. Within one machine, **replacement** may be interpreted as physically occupying the same space as was formerly occupied by the incandescent bulb. Within another machine, **replacement** may be interpreted as diverting attention from the incandescent bulb to the new light emitting device. Both are equally acceptable, and one method is not preferred over the other.

Device is also interpreted loosely. By using the word **device**, we allow teams the ability (should you choose) to use something other than a light bulb. A light bulb is perfectly acceptable however. It is assumed that the replacement for the incandescent bulb will be, in some form or another, electrical (plug in, battery, etc.). Please inquire about the use of a non-electric device. We will be sure not to share this with anyone else.

The general philosophy on this competition follows the ideology that it is not necessarily what gets done (as long as a shared basis among the machines exists), it is how it gets done. Rube Goldberg took an everyday simple task and went to great pains to complicate this task. The 2009 competition allows the students the ability to not only be creative with the way the task is completed it also allows room to become creative with the task itself. The judges are told what the machine is designed to do by the students when the students first present their machines. If the machine accomplishes what the students say it should, then the task is considered complete and will be judged as complete. Pending the judges' interpretation of the rest of the machine its functions, design, and theme, maximum points can be awarded.

Please feel free to email me at any time with any questions you may have.

Good luck to everyone on your machines!!

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Chairman, National Rube Goldberg Machine Contest