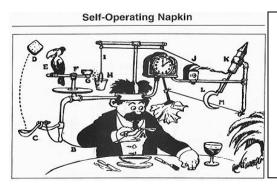
## Rube Goldberg Project Due Date: May 1st 100 points

**Objective:** To build a complex machine that will complete a simple task using at least 10 steps.

**Background Info:** Rube Goldberg is a cartoonist that created elaborate ways to do simple things. Use the website: <u>www.rubegoldberg.com</u> and <u>http://www.anl.gov/Careers/Education/rube/rube.html</u> to investigate Rube's ideas further. See example below:



Rube Goldberg<sup>™</sup> & © of <u>Rube Goldberg. Inc.</u>

Rube Goldberg walks in his sleep, strolls through a cactus field in his bare feet, and screams out an idea for self-operating napkin: As you raise spoon of soup (A) to your mouth it pulls string (B), thereby jerking ladle (C) which throws cracker (D) past parrot (E). Parrot jumps after cracker and perch (F) tilts, upsetting seeds (G) into pail (H). Extra weight in pail pulls cord (I), which opens and lights automatic cigar lighter (J).

## **Requirements:**

- 1. Must accomplish a simple task.
- 2. Must have an appropriate name.
- 3. Must execute at least 10 steps.
- 4. Steps are creative and interesting... inspired by Rube!
- 5. Must include at least 5 different simple machines.
- 6. The machine must work on its own, after being started.
- 7. <u>Must include a written description</u> and picture modeled after Rube's comics.
- 8. Record your machine with video in one <u>continuous</u> clip on your phone. (10pts for posting to YouTube)

## Important Note!!!

Please DO NOT spend money on this! You can find many of your supplies around your home. Use toys, blocks, sporting goods, recyclables etc.

## Rube Goldberg Rubric

(Partner Requirements)

	Excellent	Good	Poor	Needs
				Improvement
Machine Types (20 points)	Includes at least 3(5) machine types. Each machine is used as a true, different simple machine	Includes at least 3(5) machine types. Each machine is used as a true simple machine, but some machines may repeat	Includes at least 3(5) machine types. Some machines are not used as true simple machines.	Less than 3 simple machines.
Machine Process (20 points)	Includes at least 10(8) distinct and separate steps to accomplish the task.	Includes at least 8(8) steps to accomplish the task, but a few steps seem to blend together.	Includes at least 5(8) steps to accomplish the task, but many steps seem to blend together.	Includes less than 5(8) steps to accomplish the task.
Reliability (10 points)	Machine works reliably every time and does not require human intervention. One continuously recorded clip.	Machine works reliably, but required human intervention at some point and/or Video is recorded in multiple clips. Could be edited for viewing.	Machine frequently does not work. Video has separate clips.	Machine does not really work.
Introduction (10 points)	Machine has a name and the steps of the machine are explained to the viewer.	Machine has a name and the steps of the machine are not clearly explained to the viewer.	Has inappropriate name or the steps of the machine are not explained to the viewer.	Has inappropriate name and the steps of the machine are not explained to the viewer.
Creativity (20 points)	Rube Goldberg Master! A novel and amusing idea!	A Rube Goldberg Apprentice! Interesting, but no "wows!"	A straightforward implementation.	Copied and boring
Written Explanation ( 20 points)	Picture and written explanation are well written, amusing and follows Rube Goldberg's format.	Picture and written explanation are included and follows Rube Goldberg's format.	Picture and written explanation are included but does not follow Rube Goldberg's format.	Missing written explanation and/or picture.

Total Points: \_\_\_\_/ 100 + \_\_\_\_ bonus points Comments: