

## RUBE GOLDBERG PROJECT

Thursday and Friday Sep. 25 <sup>th</sup> and 26 <sup>th</sup>	Monday Sep. 29 <sup>th</sup>	Tuesday September 30 <sup>th</sup>	Wed. October 1 <sup>st</sup>	Thurs. Oct. 2 <sup>nd</sup>	Fri. Oct. 3 <sup>rd</sup>
<p>Directions and expectations given.</p> <p>Over the weekend, take inventory of the household items you have available to make the machine.</p> <p>Bring a list of those items to school on Monday.</p> <p>Each student must turn in a list.</p>	<p>Plan and sketch out your machine with your group during class.</p> <p>Every group must turn in a sketch.</p>	<p>Bring necessary materials to class.</p> <p>Start building.</p>	<p>Continue building.</p> <p>Bring any additional supplies needed.</p>	<p>This is your final build and test day.</p> <p>Make sure your projects are ready for presentation on Friday.</p>	<p>Machines presented.</p>

### **Rubric**

Group sketch: \_\_\_\_\_/10

Machine completes specified task: \_\_\_\_\_/10

List of at least 5 items from your house: \_\_\_\_\_/10

Machine has at least 5 distinct steps: \_\_\_\_\_/10

Machine has at least 5 different simple machines: \_\_\_\_\_/10

\_\_\_\_\_ Wheel and Axle

\_\_\_\_\_ Screw

\_\_\_\_\_ Inclined Plane

\_\_\_\_\_ Wedge

\_\_\_\_\_ Lever

\_\_\_\_\_ Pulley

Total: \_\_\_\_\_/50

## Project Hints

1. Decide on a goal for your machine. The goal is the last step of your machine. Each machine must accomplish some sort of task.
2. Gather a few things from around the house, in your toy box, junk drawer, or garage. Balls, marbles, dominoes, string, toy cars, mousetraps (never use a rat trap - it could break the bones in your hand), magnets, cardboard or tubes, etc.
3. Play with the things! What can the car bump into or knock down? Can the string pull something up? What can push the ball down the cardboard ramp? Try it out!
4. Write down any idea that pops into your head. This is called brainstorming. No matter how crazy the idea seems, just write it down for later. Even if you don't use it, it may help you think of more things. Trouble brainstorming? Then try this. Write down 50 uses for a computer disk (other than what it is intended - to store computer files).
5. Once you get a few good ideas for your machine, make a list, in order, of the steps, or draw a simple picture of the steps.
6. Plan on making quite a few changes to your machine as you build it. It may look different from your original drawing. Try not to get frustrated, this is part of learning what works best.
7. If you get stuck at a certain step of your machine, why not try to work your way backwards? Start at the last step, and connect the part to it that triggers it.
8. Maybe you've overlooked the most important element of an outstanding Rube Golberg machine: WACKINESS! Rube saw the humor in every situation. His ludicrous cartoons were a satire on the American public for their complicated methods for solving a problem. Be sure to follow your teachers guidelines if you are required to have a certain number of pulleys, ramps, levers, etc. but then, GO CRAZY! A true Rube Golberg machine would be boring without some common household items (old toys, toilet plunger, egg beater, mousetrap, typewriter...)