

Rube Goldberg Energy Project (80 marks)

Research questions are to be completed and submitted over google docs.

1. Who was Rube Goldberg? (2 marks)

2. What are the six types of simple machines? Provide a brief description and diagram of each. (18 marks)

3. What is the difference between energy TRANSFER and energy TRANSFORMATION? (2 marks)

4. TASK: Your task is to design and construct a Rube Goldberg machine using at least 3 simple machines and at least 2 energy transfers and at least 3 energy transformations to successfully complete an “end task”.

Design: Create a blueprint of your new Rube Goldberg Machine. There are no material constraints (that means use anything you can think of that is safe and humane). Identify and describe all the energy transfers and transformations.

What end task will your machine complete? _____ (1 mark)

How will the sequence begin? _____ (1 mark)

How will it end? _____ (1 mark)

Your blueprint must be on a plain white sheet of paper, coloured and completely labelled. (25 marks)

Construct: Turn your blueprint into a reality! You will construct your Goldberg machine and have it ready for presentation to the class.

Presentation Date: _____

Evaluation: Construction and Function (30 marks)

How close is the actual construction to the blueprint?	/10
Did the Goldberg complete the task set out?	/5
At least 3 simple machines are seen working.	/3
At least 2 energy transfers are seen.	/2
At least 3 energy transformations are seen.	/3
Creativity and WOW factor!	/5
Video (and/or post to youtube!?)	/2