

## RUBE GOLDBERG PROJECT PROPOSAL #2

Due date: \_\_\_\_\_

Modify the machine in your original proposal to include one chemical reaction. Use the graph paper on the back of this page to draw and label your modified diagram. Label as directed below and incorporate any changes as directed by your teacher. This is the second of three proposals and you will change your proposal as you learn more!

Group member names: \_\_\_\_\_

End Task: \_\_\_\_\_

### Requirements for the Diagram

- All six of the simple machines are used and clearly labeled on the diagram by name.
- Locations of two energy transfers clearly labeled on the diagram with the numbers 1 and 2.
- The diagram and labels should be neatly drawn with pencil and then inked in with a blue or black pen.

### Energy Transfer Calculations

Use the space below to calculate the potential energy for both energy transfers labeled on your diagram. Once potential energy is calculated, deduce what the kinetic energy would be of the object at its lowest point. ( $PE=mgh$ ; mass must be in kilograms, gravity is  $9.8 \text{ m/s}^2$ , height must be in m).

Energy transfer #1 calculation:

Energy transfer #2 calculation:

### Chemical Reaction

Use the space below to explain the chemical reaction you and your partners chose to include in your machine.

Complete chemical equation written out:

Explanation of how the chemical reaction functions within your machine:

Materials List: All materials you expect to use should be listed on a *separate piece of paper*.

### Explanation of Events

Label each event clearly on the diagram using the letters A, B, C, etc. On a *separate sheet of paper* explain the different events that happen in your machine, step-by-step. Attach this separate piece of paper to your proposal #2 when turned in.

