Rube Goldberg Project

Objectives:

1. Apply the law of **conservation of energy** to a unique situation.
2. Identify **energy conversions** in a student designed device.
3. To have some fun in the name of science.

Task:

You are asked to design and build a **Rube Goldberg** style device that puts out the flame of a standard birthday candle, using as many steps/forms of energy as possible.

Materials:

You are not restricted to the type of materials used, provided they are used in a safe manner and **present no danger**. Your device **MUST** be attached to a base to provide stability. Please check with me if you have a question about the safe use of a particular material.

Rules:

1. Your device can be activated with your assistance.
2. You should use materials that can be found at home and avoid purchasing supplies.
3. You will have three attempts at putting out the candle.
4. Time limit - You may use as much time as it takes to burn one birthday candle.
5. You may work with up to 2 other persons on your team if you wish. (Partners may be in different science classes.)
6. You need to complete a verbal presentation. An outline for your verbal presentation will be provided in class. During your presentation you will identify each step and describe the **energy conversions** in the steps.
7. Family assistance in this project is encouraged!

PROJECT EVALUATION:

Device Explanation-Speech

You will demonstrate your device to the class and describe how it will function. During your presentation you will use a script created in class to explain the energy conversions.

Device Design

Points will be awarded for the number of steps your device contains, number of different forms of energy used, and successfully putting out the candle. The more steps you have the better. You should attempt to include a minimum of five steps.

RUBE GOLDBERG DEVICES ARE DUE AT SCHOOL _____