

Name: _____ Date: _____

Culminating Task: Unit 1

Class: _____

A Rube Goldberg Machine

Task: Apply your knowledge of complex and simple machines to design a Rube Goldberg machine to make an easy task look difficult.

What You Should Know: A Rube Goldberg machine is a device that is designed to perform a simple task in a very complicated way. The machine usually includes a chain reaction.

Scientific Words: complex machine, force, inertia, simple machine

Steps to Follow:

1. Research simple machines and Rube Goldberg machines.
2. Brainstorm to identify the job your machine will perform. Break down the task into at **least 6 steps**. Use a **minimum of 3 simple** machines to complete your task.
3. Draw a diagram of your Rube Goldberg machine. Number and describe the steps in the machine. Identify the simple machines used in your complex machine.

Task Requirements:

1. **Research: Type** a summary of your research on simple machines and Rube Goldberg machines.
 - Your summary should include:
 - What are simple machines? Why are they important?
 - What is a Rube Goldberg machine?
2. **Diagram:** A labeled drawing of your Rube Goldberg machine and explanation of steps.
3. **Conclusion:**
 - Reflection
 - Identify the easiest part and most difficult challenge you experienced designing your Rube Goldberg machine.
 - Identify possible errors in your machine.
 - What would you do differently next time to improve your machine?

Final Task is Due: _____