

# RUBE GOLDBERG

## DESIGN CHALLENGE

### Challenge

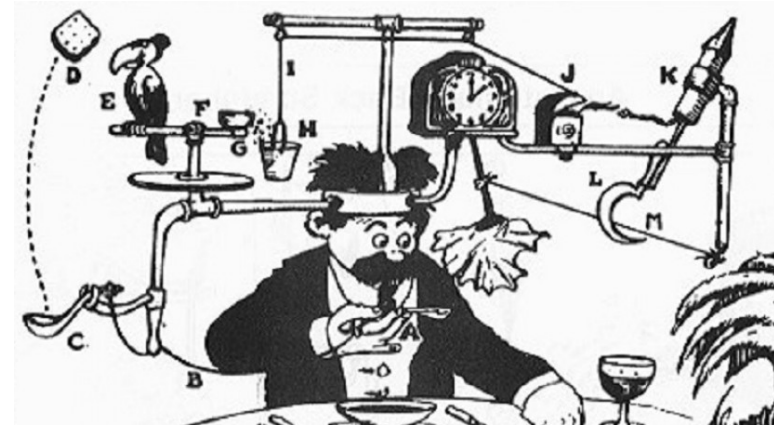
- Create a Rube Goldberg machine to put a ball into a cup.
- A Rube Goldberg machine is an invention built to complete a simple task in a complex way.
- For this challenge, there must be at least three “steps” in the machine. Each “step” in the machine, is where the transfer of energy takes place.

**Example:** If a toy car rolls down a ramp and hits a set of dominoes, the energy from the car moves to the dominoes and knocks them over. This sets off the next “step” in the machine.

### Plan & Build

- Plan each step and experiment with the materials you will be using.

Draw the plan and “steps” for your machine...



Professor Butts and the Self-Operating Napkin (1931) - Rube Goldberg

### Test & Review

- Was your design a success?
- Can you make adjustments and test the machine again?
- If you were to change the goal of the machine, what would you do differently?

### Materials & Tips



Various Materials

- Use materials around your home to complete this challenge. Our favorite items include string, books, and toys that roll.
- The recycle bin tends to be filled with great materials too!