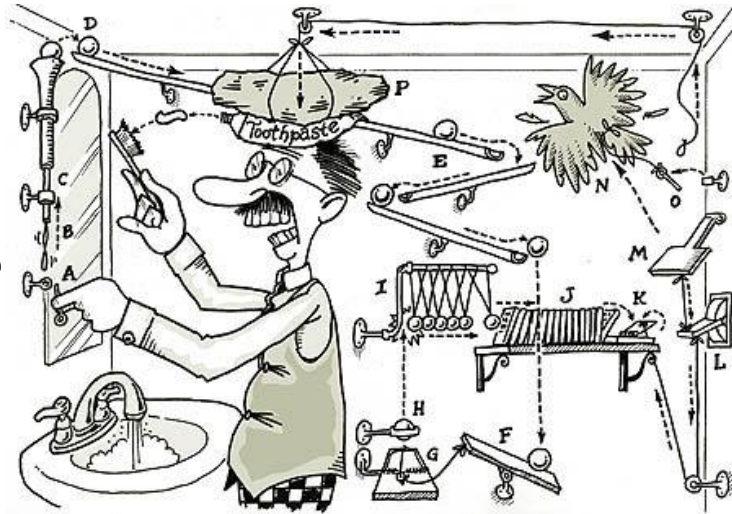


Rube Goldberg's Fire Extinguisher



Technological Challenge:

In groups of two or three you will be required to design and construct a Rube Goldberg Machine with as many "steps" as possible that will eventually extinguish a candle that is across the table from where it is activated.

Criteria:

- Your steps can be free standing or tied to anything in the class whether next to the table or attached to the ceiling.
- You may not stray from your original design plan during building as you see other peoples projects being assembled.

Materials: If there are any materials not on this list you may ask permission from the instructor to use them. Almost anything you provide will be allowed as long as it isn't 'staged' itself.

Provided Materials

- File folders
- Cardboard
- Masking tape
- Balloons
- Elastic Bands
- Glue (any type)

- Paper clips
- Stapler
- Wood
- Screws
- Nails

Evaluation

Design	/10
Quality of construction	/10
Number of successful stages in a row	/10

Questions:

1. What 2 things is Rube Goldberg most well-known for?

2. What did he attend university for?

3. How might have his education contributed toward developing the idea of his 'machines'?

4. What is the definition of sequential? AND use it in a sentence referring to Rube Goldberg machines?

5. Define these three terms
 - a. Momentum

 - b. Centrifugal force

 - c. Leverage

 - d. Pulley

TIME TO DESIGN!!!

A couple examples to get you started can be found here:

1. http://www.youtube.com/watch?v=5tThVPxJyb0&feature=player_embedded#!
 - a. "test" by video0008
2. <http://www.youtube.com/watch?v=dFWHbRApS3c>
 - a. "six rube Goldberg machines" by swallowedbyafish

Use the following pages to brainstorm ideas and use the FINAL PAGE for your good copy which will be marked.

BRAINSTORMING PAGE (will not be marked)

FINAL DRAWING

- ***Have instructor check your ideas BEFORE you start***
- Feel free to turn paper sideways to do drawing
- LABEL everything!