## **RUBE YOUR ROOM**

Have you ever played that zany game called Mouse Trap? That series of events produced by a bunch of simple machines brought together to achieve one task, is called a Rube Goldberg Machine. Rube Goldberg lived from 1883 to 1970 and won a Pulitzer Prize for his wild invention cartoons. The Dictionary defines a Rube Goldberg Machine as a "comically involved, complicated invention, laboriously contrived to perform a simple operation". These machines were always designed to make people laugh. Check out this <u>outrageous example</u> for some ideas!

## **BEFORE YOU GET STARTED**

**Recommended Ages:** Grades 3-6

Estimated Time: 45 minutes - 1 hour+

**Stuff you'll need:** Paper, pencil, markers, scissors, string, and anything else your parents approve of to make your machine.

**Caregivers should consider:** Where is the best place in the house for your girl to create her Rube Goldberg Machine? What supplies are you okay with her using?

## BADGE OR JOURNEY STEPS COMPLETED

Brownie Inventor Badge – All Steps
Brownie Journey: Think Like an Engineer – Step 1
Junior Drawing Badge – Steps 2 & 3
Junior Mechanical Engineering: Balloon Car – Step 1
Junior Mechanical Engineering: Crane – Step 1
Junior Journey: Think Like an Engineer – Step 1

## THE FUN PART

- 1. Do a tiny bit of research to learn more about the following topics:
  - · What is work?
  - What are the six simple machines?
  - · How do machines multiply force without multiplying work?
  - Who was Rube Goldberg and what made his cartoons so great?
- 2. Identify a simple task or chore that you wish to accomplish with your machine.
- 3. Select at least five simple machines that cause a chain reaction to achieve your simple chore. Test out the machines to see how they work.
- 4. Consider your space. Sketch your five simple machines that connect in such a way as to complete your chore. Don't forget to include an element of humor!
- 5. Test out your sketch and adjust where necessary until your chore is complete.
- 6. Way to go! You did it! Share a picture of your Rube Goldberg Machine on social media, with your parents' permission. Use the hashtag #GSGIDIY



