

Rules and Guidelines Summer of STEM Rube Goldberg Machine July 13-17, 2020

Submit by 11:59pm July 17

<https://docs.google.com/forms/d/1D-tX6M8eKmlpK6qOahpwufzQ0DHTO15t2DM7YJH2AuA/edit?usp=sharing>

General Information: A student can submit an individual work of art and/or a family group can submit an entry that combines multiple students' works of art into one cohesive project.

- The final task the machine must complete is pouring an 8-oz. Styrofoam cup of water (half-full) into a container placed 4 inches below the bottom of the cup.
- The machine must have minimum of ten (10) steps. There is no maximum number of steps.
- The machine must run for no more than one (1) minute per run.
- No live animals may be used in the machine.
- The machine must not imply profane, indecent, lewd expressions
- Any loose or flying objects must remain within the set boundaries of the machine. This includes, but is not limited to, drops of water, silver balloon, and other "small" objects. Steam and other gases are exempt from this rule.
- No flames, hazardous materials or explosives can be used on the machine.

Grade Level Spans:

- TK-2
- 3 – 5
- 6 – 8
- 9 – 12
- Family Group

Helpful websites:

<https://www.youtube.com/watch?v=ICv5owYrW4w>

<https://www.youtube.com/watch?v=6FzUx2EFk8s>

About Rube Goldberg - Rube Goldberg was an American Pulitzer Prize winning cartoonist, sculptor, author, engineer, and inventor, and his work is a classic example of the melding of art and science. Goldberg began his career as an engineer, and later became a cartoonist who drew elaborate illustrations of contraptions made up of pulleys, cups, birds, balloons, and watering cans that were designed to solve a simple task such as opening a window or setting an alarm clock. Interestingly, Goldberg only drew the pictures, and never built any of his inventions. However, these pictures have since served as inspiration for makers and builders who want the challenge of making wild inventions to solve everyday problems.