

Objective:   
Design a mini-Rube Goldberg machine that fits inside of a 2ft cube that will be connected to another 2ft cube that will be connected to another 2ft cube that will……..you get the idea.

Requirements:   
At the start, your mini-Rube Goldberg must fit entirely inside of the 2ft cube. Your cube actions *can* extend outside of the cube; however, it cannot inhibit the action (or view) of neighboring cubes (you must communicate with your neighbors).

Your cube must be able to receive and transfer an action or item from one cube to another. The action could be a movement or an item. Your “machine” must operate for a minimum duration of 15 seconds and a maximum duration of 30 seconds. It must have a moving part at all times. It must include a minimum of 5 stages.

No sides are allowed on the cube UNLESS they are required for the proper operation of your machine (Mr. Spry will address ideas in class)

The cube must use the Arduino Platform for a minimum of two stages. If electrical power is necessary, you must provide the power source within your cube (no electrical outlets will be available).

Completed cubes must be portable and set-up must take place within three minutes.

The overall theme for this mini-Rube Goldberg project is *The Great Gatsby*. You will be assigned a more specific theme for your cube. Your theme should be expressed through a variety of creative media embedded within the actions of the cube (Mr. Allore will address this in class).

The Cube:   
Your cube must be made out of wood. The OUTSIDE dimensions MUST BE 2ft cubed. (24in x 24in x 24in) This is not negotiable. All the cubes must fit together properly.