

Elevator Rubric

Group name:

Students in group:

Points	Elevator Box Structure	Elevator Box Function	Calibration Graph
4 BEST	Securely holds all passengers/weights in the elevator box	Elevator has a closable door so passengers can move in and out	Calibration is linear and all floor data points are filled
3	Passengers are safe but slide around in the box	Elevator is a closed box with no doors	One data point for the graph is missing
2	One passenger fell out of the elevator box	Elevator has a crumbled structure, but is enclosed	At least one data point is collected from the elevator
1 WORST	More than one passenger fell out of the box	Elevator has openings where passengers can fall out	No work is done
Total Points =			

To complete the job successfully, the elevator must meet the following requirements:

- The elevator box must safely carry 4 passengers: Washington, Roosevelt, Jefferson and Lincoln.
- The elevator box must be securely attached to the elevator cable. Safety is paramount.
- The cable must be connected to a servo motor.
- The elevator must be able to travel up to at least five different floors. Each floor is six inches high.
- Each floor must be calibrated using the rotary encoder.
- When in use with the servo motor, the top floor height accuracy must be within 5% of the total building height.
- The passengers' safety must be verified when they reach the top.

Notes and Comments: