

Grade 4-6 & 7/8 LEGO MECHANICS ELEVATOR CHALLENGE SKILLS ONTARIO COMPETITION 2022

School: _____

Judge: _____ Grade: **4-6** **7/8**

Names of Participants:

1)	2)
3)	4)

DESIGN PROCESS:

CRITERIA	Points
Evidence of brainstorming and design process (numerous solutions considered, best ideas identified and combined)	/3
Justification of choices (best ideas are justified to solve problem)	/3
Quality of blueprint/sketches (blueprints/sketches show both technical skill and technical clarity)	/3
Labeled with appropriate use of technical language (technical language is mostly appropriate for task)	/3
Criteria for success (design criteria are qualified for performance)	/3

OVERALL: /15

SAFETY:

Safe use and operation	/5
Awareness of safety (fingers, hair and clothing near moving parts)	/5

OVERALL: /10

TEAMWORK:

Design Process (all team members contribute to design plan) – <i>while this one will be difficult for us to assess virtually this can be shown during the presentation video with all members contributing</i>	/5
Commitment to the plan (whole team feels comfortable and is working with proposed design plan)	/5

Enthusiasm (team spirit and enthusiasm is evident)	/5
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OVERALL: /15

CREATIVITY:

Have fun and get creative. The more unique the design, the more points you will get.	/10
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OVERALL: /10

TESTING:

Criteria	Points
Control of functions and device (operations work the way intended)	/10
Form follows function (supports intended purpose)	/5
Elevator is able to go up and down	/5
Elevator is able to carry 2 passengers.	/5
Accuracy of completion of task (task is complete within time frame)	/5
Ergonomics (device and mechanisms are easy to use and control) & Aesthetic and quality of completion (appearance is mostly clean and pleasing)	/5
Effective use of power, speed, gears, tracks, etc.	/10
Economic and creative use of materials (materials are used appropriate to need)	/5

OVERALL: /50

Comments: _____

JUDGING CRITERIA:	TOTAL: /100
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As the rules state, there are no ties. If the score is even after the contest, the conformance to design components will be used as the tie breaker