Grade 4-6 & 7/8 LEGO MECHANICS FERRIS WHEEL CHALLENGE
SKILLS ONTARIO COMPETITION 2021

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) – *while this one will be difficult for us to assess virtually this can be shown during the presentation video with all members contributing*	/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

OVERALL: **/15**

CREATIVITY:

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

OVERALL: **/10**

TESTING:

Criteria	Points
Control of functions and device (operations work the way intended)	/10
Form follows function (supports intended purpose)	/5
Ferris Wheel is 40cm in diameter *(Please measure in your video with a measuring tape so that judges can see)*	/5
Ferris Wheel has 6 passenger Cars	/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, pulleys and levers.	/10
Economic and creative use of materials (materials are used appropriate to need)	/5

OVERALL: **/50**

Comments:_____
_____
_____
_____
_____
_____
_____

JUDGING CRITERIA:	**TOTAL:**	**/100**

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