

Limestone Skills Competition 2026

Lego Mechanics Challenge – Grade 7/8 - Team of 4

Competition Chair - Don Wartman; wartmand@limestone.on.ca; 613 539 2321

1 Purpose of the Contest

To provide competitors with the opportunity to demonstrate both through practical and theoretical application, their skills and task knowledge in the industry must be relevant to:

- Simple mechanical design and construction using LEGO Components.
- Problem solving in relation to provided challenges

2. Contest Description

There will be 3 challenges to this competition and all teams will bring the same necessary materials to solve them. All three challenges must be attempted by every team. There is no programming component to this challenge. The Lego Brain Hub will be used in the default setting to be a power supply and motor/sensor connector. A copy of the contest and instructions will be provided on site on the day of the competition. Competitors will be provided with approximately 5 hours to complete the challenges and will be scored and marked accordingly by judges. Teams may attempt challenges in any order and have numerous practice runs as long as the challenge is not being used by another team. If more than one team is at a challenge then they will alternate turns. However, official scoring runs by a judge will take precedence over practice runs.

3. JUDGING CRITERIA

Challenge 1: /27

Challenge 2: /27

Challenge 3: /27

Teamwork and Enthusiasm: /19 broken down as follows

a.Collaboration: all members working together and listening to each other /6

b.Design Process: planned development & uniqueness of problem solving /6

c.Enthusiasm: team spirit, initiative and positive-talk /7

Each challenge will be weighed equally. Each team will only be allowed 3 official judged scoring attempts. The best score of the 3 attempts will determine the team's score. The total combined scores of the three challenges in combination of the Teamwork and Enthusiasm component will determine the final standings.

There can be no ties – if the scores are even after the contest, then the highest total combined points for the 3 challenges will be used as the tie breaker.

4. EQUIPMENT AND MATERIALS

Supplied by Competitor:

- Lego Education Spike Prime Set #735047
- Lego Education Spike Prime Expansion Pack #**735048**
- Refillable water bottle
- Lunch and Additional snacks (recommended peanut-free)
- Competitors must be dressed in a clean and appropriate manner with no logos other than that of their school/school board.

PLEASE NOTE:

Competitors are only able to use the SPIKE Prime Lego sets for the challenge.

Competitors are not to bring their own computer to the Skills Competition.

Books, notes, materials and assisting devices are not permitted

Media devices, such as cell phones, smart phones, tablets or watches are not permitted on the contest site.

5. SAFETY

Safety is a priority at the Limestone Skills Competition. At the discretion of the Chair, any competitor can be removed from the competition site for not having the proper safety equipment and/or not acting in a safe manner.