



2019 - 2020 CARDBOARD BOAT RACES RACE GUIDELINES



SkillsCompétences
Canada Ontario

www.skillsontario.com

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*This document is only to be used in preparation for the Cardboard Boat Races
Ce document doit être utilisé que dans le cadre de la préparation aux Courses de bateaux en carton élémentaires*

If there is any discrepancy between the English and the French information herein, the English version shall stand.

Elementary Cardboard Boat Race Events are intended for students in grades 7-8

Secondary Cardboard Boat Race Events are intended for students in grades 9-12

Registration opens on Monday, September 16th, 2019 at 9:00 am! Please visit <https://www.eventbrite.com/o/skills-ontario-26700023961> to begin the registration process.

Skills Ontario would like to invite your school to participate in one of the annual Cardboard Boat Races being held during the 2019-2020 school year. Please visit www.skillsontario.com to view the upcoming Cardboard Boat Race Schedule.

Venues and dates are subject to change – but substantial notice will be given in this event.

The registration fee is \$125.00 per team for affiliated schools.

Schedule of the Day**

TIME	DESCRIPTION
9:00 a.m. – 9:15 a.m.	Arrival: Sign-in team and hand-in boat designs
9:15 a.m. – 9:30 a.m.	Welcome and Orientation
9:30 a.m. – 11:30 a.m.	Boat Construction
11:30 a.m. – 12:15 p.m.	Clean-up and Lunch
12:15 p.m. – 12:30 p.m.	Prepare to enter pool by number
12:30 p.m. – 2:30 p.m.	Race and Weight Challenges
2:30 p.m. – 2:45 p.m.	Final Clean-up of Construction Area
2:45 p.m. – 3:00 p.m.	Awards Presentation

**** Times may vary according to race location and pool availability. Registered teams will receive an email two (2) weeks prior to the event if the schedule is different from the one printed above.**

CHALLENGE OVERVIEW

Teams of up to four grade 7 or 8 students from the same school will design and construct one (1) boat to participate **in both** a speed and a weight challenge in a pool. Students will be given the materials to construct the boat and two (2) hours of building time. We strongly encourage all teams to build and test sample boats prior to the event. Drawings of boat designs will be collected upon sign-in for judging.

Teams will be judged on planning and design, quality of construction, visual appeal, teamwork and team spirit, knowledge of essential skills, safety and cleanliness as well as the boat's speed and weight capacity. Each speed and weight challenge will be timed and recorded by our judges. *For a breakdown of what the judges will be looking for please consult the Construction and Race Rules and Regulations on pages 5 - 9.*

The top **TWO** Elementary boat race teams from each regional race will be invited to participate in the Elementary Provincial Championship held in Belleville in March 2020!

The top **THREE** Secondary boat race teams from each regional race will be invited to participate in the Secondary Provincial Championships held in Belleville in March 2020!

ELIGIBILITY

- Affiliated schools may enter up to two (2) teams of four (4) students each per season.
- Please note registration is on a first-come, first-served basis and waitlists often occur.
- Teams must be made up of grade 7 and 8 students from the same school.

REGISTRATION PROCESS

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- **Step #1** – Teachers reserve team space(s) online at <https://www.eventbrite.com/o/skillscompetences-ontario-26700023961>. This must be done a minimum of two (2) weeks prior to the event, but please note that most races fill up shortly after registration opens.
- **Step #2** – Bring individual team member signed informed consent forms directly to the event. Any student that does not have a signed informed consent forms form with them will not be permitted to compete.

Cancellations must be received no later than one (1) week prior to the event to avoid being charged full registration fees.

****IMPORTANT:** Students will not be permitted to participate if Skills Ontario does not receive a completed and signed copy of "SKILLS ONTARIO PARTICIPANT CONDITIONS FOR 2019-2020 PROGRAMS AND COMPETITIONS" form for each individual team member on the day of the event.

ON EVENT DAY

1. All team members should come prepared with signed informed consent forms, swimwear and towels to enter the pool for the race and/or weight challenge.
2. Ensure teams have packed their own straight edges, tape measures, cutting devices, pencils/pens, decorations and copies of the boat designs.
3. Two (2) pieces of pizza and drinks will be provided to team members and teachers (advisors) at lunch time. If participants feel they require additional sustenance, it is highly recommended they bring their own snacks with them. Any food brought to the venue must be nut-free.
4. **Teachers/Advisors are not to provide any advice** to their students during the build portion of the event except to advise them of safety concerns. **Teachers must remain in the building at all times and be easily reachable by Skills Ontario staff.** They are allowed to coach their teams poolside during the weight challenge.
5. There is often leftover cardboard available after the event. Please come prepared to help yourself to any extra sheets. Each sheet can retail for up to \$7.00.

TOOLS AND MATERIALS

Supplied by Skills Ontario*:

1. Two 4' x 8' sheets of ¼" corrugated cardboard
2. 2 rolls of duct tape (48 mm x 55 m)
3. An adhesive sheet with specified boat number
4. Lunch
5. PFD/life jackets

**materials supplied are subject to change but notice will be given where possible*

Supplied by teams:

1. Cutting devices (utility knife, box cutters, retractable blade Exacto-knife)
2. Pencils/pens/markers
3. Suitable attire to race in pool

4. Boat design sketch (two copies)

Optionally supplied by teams:

1. Decorations to enhance the appearance* (painters tape and sticky tack for decoration adhesive use only)
2. Straight or angled edges/rulers of any length or size
3. Tape measures, a compass and/or protractor
4. Tarp (for protecting the finished boat at locations where teams carry their boat outside to access the pool)
5. Saw horse
6. Camera – including GoPro's
7. Nut-free snacks and drinks

Note: No other tools or equipment may be used in the construction of the boat. No hammering or clamping devices allowed (with the exception of a GoPro camera attached to boat at team's discretion). Electrical power will not be available at any time. (* see construction regulation #5)

CONSTRUCTION RULES AND REGULATIONS

1. Each team must bring **TWO COPIES** of each boat design sketch. One copy is to be submitted for evaluation at the time of arrival and registration. The second copy can be used by the team during construction.
2. **During the construction period, judges will ask students about their designs** and this will account for an additional part of the design mark.
3. Boats must be designed to allow team members to be **fully contained** within the structure of the boat. Rafts or surfboard styles will not be permitted.
4. ****NEW** Racers are not allowed to use any devices to propel the boat in the water other than their own hands (Ex. Paddles, oars, etc...).**
5. Teams are permitted to bring materials with which to decorate their boat. Decorations must not aid in the speed or buoyancy of the boat. **Lacquers, waxes (i.e. crayons), paints, sprays, aerosol cans, confetti and glitter are not permitted for decoration as they can cause issues with the pool systems.** The use of aerosol cans, confetti and glitter is **strictly prohibited**. Teams will be asked to remove all water soluble decorations after "Visual Appeal Judging" and before entering the water (i.e. during lunch time). Teams are permitted to use painters tape and/or sticky tack to tack on decorations that will be removed before entering the pool.
6. Teams are not permitted to use aids such as a prototype, to-scale patterns or prefabricated materials for tracing purposes at the event.

7. All team members will be weighed during the construction phase and will have to advise Skills Ontario staff which team members are going to participate in the first round of the weight challenge. This is known as the **Declared Weight** and must be finalized in the construction phase. *Please review the Frequently Asked Questions for a more thorough description of "declared weight".*
8. Teams will be asked during the construction phase to declare who their racer(s) will be.
9. The provided adhesive sheet with specified team number must be attached in a **visible** location on the boat.
10. ****NEW**** Teams must also write six (6) of the 144 skilled trades recognized by Ontario in marker on their boat for full marks (5) within the Skilled Trades Knowledge Category. A list of recognized Skilled Trades can be found here: <https://www.ontario.ca/page/list-skilled-trades-ontario>
11. All left over materials must be handed into the Skills Ontario staff at the end of the construction phase.

RACE RULES AND REGULATIONS

1. Shoes will not be permitted on the pool deck.
2. Boats will race in timed heats of two (2), three (3) or four (4) boats.
3. All team members racing must wear the PFDs/life jackets provided.
4. At the team's discretion, one (1) or two (2) team members may race the boat and it must be the racer(s) declared during the construction phase. No late substitutions will be allowed.
5. Only kneeling or sitting in the boat will be permitted during the speed and weight challenges.
6. Teams will be given two commands:
 - a. "Racers Ready": teams will make eye contact with the starter
 - b. "Boats in the water and Racers in the boat": teams will have up to 30 seconds to climb into their boats and position the boat.
7. After 30 seconds or when all teams in the heat are ready (whichever comes first) a whistle will blow signaling the start of the timed race.
8. Up to three (3) team members on the pool deck are allowed to steady and hold the boat for the start of the race. Teachers may not assist.
9. If team members on the deck push the boat at the start or allow the boat to drift away from the edge a **five (5) seconds penalty will be added to the time.**
10. If a team uses sides of pool to propel their boat forward a five (5) second penalty will be added to the time

11. Time will stop once any **structurally significant** part of the boat touches the other end of the pool.
12. Only the racers' hands may be used to propel the boat.
13. Team members must enter and exit the boat from the ends of the pool – not the sides of the pool deck (this will help ensure that teams designated to the middle lane are not at a disadvantage).
14. Racers are responsible for avoiding any obstacles in their designated lane (**i.e. buoys, ladders, and submerged stairs**). **Times will not be adjusted if a boat becomes 'hung-up' on an obstacle.**

TRANSITION BETWEEN RACE AND WEIGHT CHALLENGE

1. All intact boats must proceed to the weight challenge immediately following their race heat.
2. After the speed challenge, teams will be allowed to remove the boats from the pool to pour out excess water; the boat must then be immediately placed back in the pool for the weight challenge.
3. ****NEW**** Boats that are unable to complete the speed challenge due to tipping, or structure failure, may not compete within the weight challenge as the disintegrating cardboard may harm the pool's filtration systems.
4. Boats deemed unsafe by a lifeguard will not be permitted to enter the weight challenge.
5. Drying tools (paper towels, hair dryers, towels, and fans) will not be permitted.

WEIGHT CHALLENGE RULES AND REGULATIONS

1. Weight will be determined by the combined body weight of the individuals in the boat. Additional weight-bearing objects (hand weights, weighted belts, dumb bells) will not be permitted.
2. Individuals must be fully contained within the structure of the boat. Teams may use their hands to hold the boat edge (top edge only, not the sides), but will not be permitted to touch the water outside of the boat or the ledges of the pool, except when asked to help reposition the boat at a judge's or lifeguard's request.
3. Feet and legs must be contained within the boat. Only kneeling or sitting in the boat will be permitted. For safety reasons, competitors may NOT lie down.
4. Participants must wear PFDs/ lifejackets during the weight challenge.
5. Boats must begin the weight challenge with the weight they declared during the construction phase. (i.e. those individuals elected by their team to go into the boat first)

6. Boats must hold declared weight for 90 seconds without “sinking” in order to score any weight challenge points. Teams touching the water outside of the boat, buoys, or the ledges of the pool during the timed portion of the weight challenge will have a 5 second penalty, for example if a team member touches the water at 80 seconds, they must hold their declared weight for 95 seconds(a 5 second addition to 90 seconds)
7. Additional individuals may be added to boats after 90 seconds have passed. Each new weight must be held for an additional 60 seconds.
8. Teams must use their hands to paddle their boats back towards the wall before adding additional people to their boat. Boats may only be ‘pulled’ towards the wall when within arms-length of the end of the pool where the judge is standing – boats **CANNOT** be pulled from the pool sides.
9. The final weight held for the full time will be recorded as the maximum weight achieved for the team.
10. **ONLY student competitors may compete in the weight challenge.** All team members¹ must be used in the weight challenge before other registered student participants are added. No spectators or teacher volunteers are permitted.
11. Teachers are permitted poolside during the weight challenge to help students safely enter the boat, steady the boat, and coach their teams,
12. ****NEW**** A boat will be considered “sunk” once **TWO** corners of the boat are submersed/allowing water within the structure.

SCORING

Category	Maximum Points
Construction	
Quality of Construction	5
Planning and Design	5
Safety and Cleanliness	5
Teamwork and Team Spirit	5
Visual Appeal	5
Skilled Trades Knowledge	5
Total Construction	30
Speed Challenge	
Speed (top twenty fastest times)	35
Total Speed Challenge	35
Weight Challenge	
Weight (top twenty greatest weights held)	35
Total Weight Challenge	35

¹ Unless there is a valid medical or health and safety issue that precludes all team members from participating and Skills Ontario staff have been made aware of the situation.

Scoring for the race/weight challenge:

1 st – 35 points	11 th – 14 points
2 nd – 33 points	12 th – 12 points
3 rd – 31 points	13 th – 10 points
4 th – 29 points	14 th – 8 points
5 th – 27 points	15 th – 6 points
6 th – 25 points	16 th – 5 points
7 th – 23 points	17 th – 4 points
8 th – 21 points	18 th – 3 points
9 th – 18 points	19 th – 2 points
10 th – 16 points	20 th – 1 point

JUDGES' DECISIONS ARE FINAL

TIE BREAKERS:

- In the event of a tie between two or more teams, ties will be broken by using the score from the weight challenge, then the speed challenge, then total construction, then essential skills knowledge, then quality of construction.

Teams who damage the construction location floor with cutting devices or adhesive will be disqualified.

Photo Informed Consent Forms

Camera crews and media will be onsite at the race taking footage and photos of the event. Students who do not have their parent's/guardian's permission to be photographed will be asked to wear an identifier. This will help ensure students without a signed photograph informed consent form will not appear in publications or get posted on social media and/or our website.

Inclement Weather

Cardboard Boat Races will be postponed if buses are cancelled for the majority of participants or if Skills Ontario staff members cannot safely travel to the host location. Notifications will be sent out to e-mail addresses provided by teachers during registration. The notification will be sent out **no later than 7am** on the day of the race.

If the boat race must be cancelled due to weather conditions, Skills Ontario will make every reasonable attempt to reschedule before the Provincial Championships take place.

Pool Safety Guidelines

Skills Ontario's pool based activities comply with OPHEA Guidelines and the R.R.O 1990, Reg. 565 Public Pools under the Health Protection and Promotion Act.

1. In keeping with OPHEA swim test guidelines (<http://safety.ophea.net/safety-plan/168/1840>), Skills Ontario requires **all participants** in the pool activities to **wear a personal flotation device (PFD) at all times while in the pool**. PFD's will be provided by the venue.
2. Participants may also be required to adhere to **venue specific policies**. All registration contacts will be notified by email in advance of the event regarding these requirements.
3. It is the responsibility of the registration contact to be familiar with and follow their school board specific policies in regards to water based activities.

Questions?

Please consult boatrac@skillsontario.com

If you have any further questions please consult the Cardboard Boat Race Frequently Asked Questions document published on our website skillsontario.com or contact the Cardboard Boat Race Program Coordinator at boatrac@skillsontario.com.