



# CARDBOARD BOAT RACE

## ELEMENTARY GUIDELINES

### 2017-2018



[www.skillsontario.com](http://www.skillsontario.com)

Materials for this competition have been generously donated by:



*This document is only to be used in preparation for the Elementary Cardboard Boat Race  
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.

Registration opens on Friday, September 29, 2017! Please visit <https://register.skillsontario.com> to begin the registration process.

Skills Ontario would like to invite your school to participate in one of the annual Cardboard Boat Races for elementary schools being held during the 2016-2017 school year at the following locations:

- **Wednesday, October 25, 2017**
  - Dryden Pool & Fitness Centre, Dryden 1
- **Thursday, October 26, 2017**
  - Dryden Pool & Fitness Centre, Dryden 2
- **Tuesday, November 21, 2017**
  - Sir Winston Churchill CVI, Thunder Bay
- **Tuesday, January 23, 2018**
  - Wayne Gretzky Centre, Brantford
  - Confederation Education Centre, Ottawa 1\*
- **Wednesday, January 24, 2018**
  - Confederation Education Centre, Ottawa 2\*
  - North Huron Wescast Community Center, Wingham
- **Tuesday, January 30, 2017**
  - Centre Wellington Community Sportsplex, Fergus
- **Wednesday, January 31, 2018**
  - Quinte Sports Centre, Belleville
  - A.B. Ellis Public School, Espanola
  - Swansea Public School, Toronto
- **Thursday, February 1, 2018**
  - L' Amoreaux CI, Scarborough

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

\*Denotes a bilingual event

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

### Schedule of the Day - DRAFT\*\*

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 heat 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 detailed breakdown of what the judges will be looking for please consult the complementary Frequently Asked Questions Guide.*

The top three teams from each regional race will be invited to participate in an Elementary Provincial Championship held in Waterloo in early March!

### **TEACHERS:**

During the build portion of the event, teachers (advisors) are not to provide any advice to their students except to advise them of safety concerns. Teachers will be allowed to coach their teams poolside during the weight challenge.

### **ELIGIBILITY:**

- Affiliated elementary 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:**

- Step #1 – Teachers reserve team space(s) online at <https://register.skillsontario.com>. 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 at the end of September. Teams registering two weeks prior to the race are likely to be placed on a waitlist.
- Step #2 – Teachers or students register team members with name and emergency information online a minimum **two (2) weeks** prior to the event.

- Step #3 – Fax or scan and email (competitions@skillsontario.com) individual team member signed consent forms to (519) 749-6322 at least **one (1) week** prior to the event.

**\*\*NOTE:** Registration will not be considered complete until Skills Ontario receives a completed and signed copy of “SKILLS ONTARIO PARTICIPANT CONDITIONS FOR 2017-18 PROGRAMS AND COMPETITIONS” form for each individual team member. **Students will not be permitted to participate if their form has not been received. Please bring all original forms with you to the race, just in case there is a problem with the fax submission. Bringing the forms to the race, will ensure participation is allowed.**

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

## **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 54 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 their 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. 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.
3. Any devices used to propel the boat in the water must be constructed from materials provided and completed during the build time – ie no paddles can be constructed during lunch.
4. 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 or sprays of any kind are not permitted for decoration.** 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.
5. Teams are not permitted to use aids such as a prototype, to-scale patterns or prefabricated materials for tracing purposes at the event.
6. 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”.*
7. Teams will be asked during the construction phase to declare who their racer(s) will be.
8. The provided adhesive sheet with specified team number must be attached in a **visible** location on the boat.
9. \*NEW\* Teams will be asked to write 4 examples of careers in the skilled trades and technologies on to their boat. Students will be asked to briefly speak about each career to the assigned judge.
10. 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 if required by the Lifeguard on site. It is up to Teacher's to enforce any School Board specific rules regarding life jackets.
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. Time will stop once any **structurally significant** part of the boat touches the other end of the pool.
11. Only the racers' hands, along with devices constructed of provided materials, may be used to propel the boat.
12. 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.
13. 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. Boats that are unable to complete the speed challenge due to tipping, may compete in the weight challenge; **however, boats must be dragged through the water to the pool end to ensure fairness.**
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, arms included. Teams may use their hands to hold the boat edge, 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 may be required to wear PFDs/lifejackets at the lifeguard's or School Board's 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). No late substitutions are permitted.
6. Boats must hold declared their 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 one point deducted from their overall mark.
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. The final weight held for the full time will be recorded as the maximum weight achieved for the team.
9. 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 edge of the pool where the judge is standing.

10. All team members<sup>1</sup> must be used in the weight challenge before student volunteers are added.
11. Teachers are permitted poolside during the weight challenge to help students safely enter the boat, steady the boat and coach their teams.

## SCORING

### RACE and WEIGHT CHALLENGE:

- Additional points awarded for top 20 placing teams in both overall speed and highest weight as follows:

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

**\*JUDGES' DECISIONS ARE FINAL\***

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

<sup>1</sup> 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.



**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.**

**How to Get Involved**

1. Affiliate your school on the Skills Ontario website, [www.skillsontario.com](http://www.skillsontario.com)
2. Register your boat teams on the Skills Ontario website, <https://register.skillsontario.com>. Team spaces must be reserved online a minimum **two (2) weeks prior** to the event date, but please note that most races fill up shortly after registration opens at the end of September. Teams registering two weeks prior to the race are likely to be placed on a waitlist. Individual online registration must be completed a minimum of **two (2) weeks prior** to the event date and signed consent forms are to be submitted a minimum of **one (1) week prior** to the event date. (Please refer to page 3 of this document for complete instructions on how to register.)

**ON EVENT DAY:**

1. All team members should come prepared with waivers, 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 (or boxed lunch) 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. **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.**

**Photo Waivers**

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 waiver will not appear in publications or get posted on social media and/or our website.

## Questions?

If you have any further questions please consult the Cardboard Boat Race Frequently Asked Questions document published on our website [www.skillsontario.com](http://www.skillsontario.com) or contact Natasha Oliver, Competition Coordinator at [noliver@skillsontario.com](mailto:noliver@skillsontario.com).

## Inclement Weather

Cardboard Boat Races will be cancelled only under the following conditions:

- The School Board(s) where the event is being hosted have “Closed” for the day
- And/or critical staff cannot safely travel to the hosting location

The event will continue as planned if ‘buses are cancelled’.

If the boat race must be cancelled due to weather conditions, Skills Ontario will make every reasonable attempt to reschedule within the same school year.

Unfortunately, no refunds can be made to participant fees in the event of a last minute cancellation due to weather conditions.