2012-2013
Elementary Cardboard Boat Race
Guidelines

Materials for this competition have been generously donated by:

SKILLS WORK!®

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

Elementary Cardboard Boat Race Guidelines
2012 - 2013

Skills Canada – Ontario would like to invite your school to participate in one of the annual Cardboard Boat Races for elementary schools being held during the 2012-2013 school year at the following locations:

- Tuesday, October 23 2012 Marathon High School and Port Hole Pool, Marathon
- Tuesday, January 29, 2013 Jockvale Elementary School, Ottawa*
- Tuesday, January 29, 2013 North Park Collegiate and Vocational School, Brantford
- Tuesday, January 29, 2013 Swansea Public School, Toronto
- Tuesday, January 29, 2013 West Nipissing Re creation Complex, Sturgeon Falls*
- Tuesday, January 29, 2013 Black River Public School, Sutton
- Tuesday, January 29, 2013 Sir Winston Churchill CVI, Thunder Bay

Venues are subject to change – but substantial notice will be given in this event.
*Denotes a bi-lingual event
The registration fee is $100.00 per team for affiliated schools.

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 submitted for judging.

Teams will be judged on planning and design, quality of construction, visual appeal, teamwork and team spirit, knowledge of skilled trades, 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 break-down of what the judges will be looking for please consult the complementaryFrequently Asked Question Guide.*

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

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.
- 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:

Elementary Cardboard Boat Race Guidelines
2012 - 2013

- 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.
- Step #2 – Teachers or students register team members by name online a minimum **one (1) week** prior to the event.
- Step #3 – Fax 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 Canada – Ontario receives a completed and signed copy of "SKILLS CANADA – ONTARIO PARTICIPANT CONDITIONS FOR 2012-13 PROGRAMS AND COMPETITIONS" form for each individual team member. **Students will not be permitted to participate if their form has not been received.**

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

All invoicing will be processed following the competition.

Tools and Materials:

Supplied by Skills Canada – Ontario:

1. Two 4' x 8' sheets of ¼" corrugated cardboard
2. Approximately 48 mm x 54 m of duct tape
3. Less than 500 ml LePage Pres-Tite® Green Contact Cement (exact quantities will vary by location)
4. Two pairs of vinyl gloves
5. An adhesive sheet with specified boat number
6. Lunch
7. PFD/life jackets

Supplied by teams:

1. Cutting devices
2. Pencils/pens/markers
3. Suitable attire to race in pool
4. Boat design sketch (two copies)
5. Safety glasses for all team members

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. Paint Brush and/or mini roller with tray to apply contact cement
5. Tarp (for protecting the finished boat at location where teams carry their boat outside to access the pool)
6. Saw horse
7. Camera

8. 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. 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.
4. Contact cement must be used as a **bonding agent only** (i.e. contact cement may only be applied if it is to be sandwiched between materials such as cardboard or tape)**.** Internal and external walls (sides, hull, floor) of boat must be free of exposed contact cement.
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), latex/water-based paints and spray paints 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.
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 must wear safety glasses while working with contact cement.
8. All team members will be weighed during the construction phase and will have to advise Skills Canada – 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".*
9. The provided adhesive sheet with specified team number must be attached in a **visible** location on the boat.
10. Teams must write five Skilled Trade Careers on their boat that use the skills they are practicing in the Cardboard Boat Race. For a list of skilled trade careers please visit www.apprenticesearch.com and/or www.careersintrades.ca/youth

RACE RULES AND REGULATIONS

1. Shoes will not be permitted on the pool deck.
2. Boats will race in timed heats of two (2) or three (3) 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.
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.

   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.
7. 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.
8. 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.
9. Time will stop once any **structurally significant** part of the boat touches the other end of the pool.
10. Only the racers' hands, along with devices constructed of provided materials, may be used to propel the boat.
11. 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).
12. 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. 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, dumbbells) 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, 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 discretion 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 their time paused or reset.
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. All team members[1] must be used in the weight challenge before student or teacher volunteers are added.
10. Teachers are permitted poolside during the weight challenge to help steady the boat and coach their teams.

SCORING

RACE:

- Additional points awarded for 20 fastest times overall as follows:

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

WEIGHT CHALLENGE:

- Additional points awarded for the top 20 weights held overall as follows:

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

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

Elementary Cardboard Boat Race Guidelines
2012 - 2013

JUDGES' DECISIONS ARE FINAL

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**

JUDGES' DECISIONS ARE FINAL

TIE BREAKER:

- 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 skilled trades knowledge, then quality of construction.

HOW TO GET INVOLVED

1. Affiliate your school on the Skills Canada – Ontario website, www.skillsontario.com
2. Register your boat teams on the Skills Canada – Ontario website, https://register.skillsontario.com. Team spaces must be reserved online a minimum **two (2) weeks prior** to the event date. Individual registration and signed consent forms are to be submitted a minimum of **one (1) week prior** to the event date. (Please refer to page two of this document for complete instructions on how to register.)

ON THE DAY:

1. All team members should come prepared with 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.**

DRAFT* SCHEDULE OF THE DAY*

TIME	DESCRIPTION
9:00 a.m. – 9:15 a.m.	Arrival and Registration
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.**

JUDGES' DECISIONS ARE FINAL

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 a wrist band. The water proof wrist band will help ensure students without a signed photograph waiver won't 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 or contact Emily Waldron, Cardboard Boat Race Coordinator at 1-888-228-5446 extension 221 or by email at emilyw@skillcanada.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 Canada – 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.