

AUTOMOTIVE SECTOR - AUTOMOTIVE REPAIR TECHNICIAN - SAIL CARS

CHALLENGE

A Woman in Automotive Pioneer!

In 1888, automotive pioneer Bertha Benz made history when she undertook the first long-distance drive in history. Benz drove the Benz Patent-Motorwagen a distance of 106km in an effort to show the public the usefulness of the newly created automobile. During the course of the trip, she encountered numerous mechanical problems that she solved herself, using a hat pin to clean a blocked fuel pipe, and her garter to repair the ignition.



Smart, creative females like you and Bertha have been solving problems in the automotive field for centuries, ensuring we have safe, energy efficient methods of transportation. Follow in Bertha's footsteps by taking your own long-distance drive! In this challenge, you'll be creating a car powered solely by your own breath. See challenge instructions below.

What is an Automotive Repair Technician?

The field of motive power is broad, and people can specialize their skills! Automotive Repair Technicians generally can work on engines and the various parts (glass, brakes, fluids, electrical, paint, etc.) that make up motorized vehicles (cars, trucks and coaches, planes, trains, etc.).

Related Skilled Trades: Automotive

Relevant Skills: Planning and design, creativity, green energy

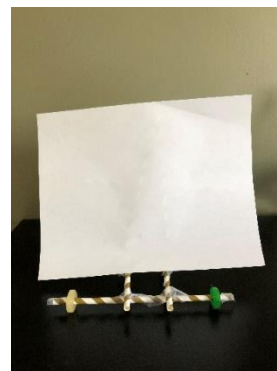
[Click here for a full list of all recognized Ontario skilled trades](#)

CHALLENGE MATERIALS

- Scissors
- 4 lifesavers or bottle caps (If using bottle caps, make sure to have a parent pierce the holes for you)
- 8 straws
- Up to 1 metre of scotch or masking tape
- One 8 ½" x 11" piece of paper
- Measuring tape or ruler

CHALLENGE INSTRUCTIONS

1. You must draw your design on paper first. Designs with measurements and a legend will receive higher marks (see judging section for more information)
2. Only use the materials required above.
3. Once complete, place your sail car on the starting line. Take one big breath and blow into the sail, remaining behind the start line as you're blowing. Measure how far your car goes from the starting line.
4. Adjust your design to see if you can beat your record!
5. **You will need to highlight what you as a girl can do and why girls ROCK! See full submission requirements below.**



JUDGING/SCORING

There are AMAZING prizes to be won and EACH CHALLENGE has first, second, and third place prizes!

See website for more details!

Submissions will be marked in the following:

Distance Achieved	Points
Vehicle travelled 0 – 0.5 meters	5 points
Vehicle travelled 0.5 – 1 meters	10 points
Vehicle travelled 1 – 1.5 meters	15 points
Vehicle travelled more than 2 meters	20 points
Total Marks (Total out of 20)	
REMEMBER, you will need to highlight what you as a girl can do and why girls ROCK!	

Design Plan	Points
No Plan was provided	5 points
Challenger had plans with measurements.	10 points
Plans were to scale with measurements outlined. Provided Length	15 points
Plans were to scale with measurements outlined. Detailed. Provided Length. Straight edge was used. Lines are neat and clean.	20 points
Total Marks (Total out of 20)	

Challenger Total Marks: / 40 points

Submission

Submissions could be videos and/or pictures of your project. **You will need to highlight what you as a girl can do and why girls rock!** This can be done in either voice recordings within a video, or through a written document that is photographed with your project.

Submissions are to be posted on Twitter between October 4th – 8th. Tag **@skillsontario** and use the hashtag **#SkillsIDG2021**. If you do not have Twitter, or are uncomfortable posting, please email your submission to info@skillsontario.com.

Skills Ontario will directly message winners on Twitter to let them know they won. If you choose to email your submission, we will reach you through the address you contacted us with. Winners will be publicly announced on **October 19th** on Twitter.