



Contest Description

Automobile Technology

Secondary

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1. SKILLS FOR SUCCESS FOR CAREERS IN SKILLED TRADES AND TECHNOLOGY

The Government of Canada has updated the previous Essential Skills framework to the new Skills for Success model in response to the evolving labour market and changing skill requirements. This model outlines nine fundamental skills Canadians need to thrive in work, education, training, and daily life.

Skills/Compétences Canada aims to highlight the importance of these skills, vital for success in trade and technology careers. Competitors can see how Skills for Success are integrated into contest descriptions, projects, and project documents. Recognizing these skills during the competition helps competitors match tasks with specific skills necessary for success and understand how these skills apply within their trade or technology programs and future careers.

The nine key Skills for Success, validated for workplace success, are:

1. Numeracy
2. Communication
3. Collaboration
4. Adaptability
5. Reading
6. Writing
7. Problem Solving
8. Creativity and Innovation
9. Digital

2. CONTEST INTRODUCTION

2.1. Description of the associated work role(s) or occupation(s):

https://www.skillscompetencescanada.com/en/skill_area/automobile-technology/

Automotive Service Technicians are responsible for repairing and maintaining cars, trucks, and other motor vehicles. They use a variety of tools and computerized diagnostic equipment to identify and fix mechanical issues. Their tasks include routine maintenance such as oil changes, tire rotations, and filter replacements, as well as more complex repairs like engine diagnostics and electronic system troubleshooting. Mechanics also use precision measuring tools to ensure repairs and adjustments meet exacting standards. With advancements in automotive technology, mechanics now require knowledge of electronics and computerized systems, making their role increasingly technical and focused on vehicle diagnostics.

2.2. Purpose of the Challenge

The purpose of this challenge is to inspire and engage high school students who have a keen interest in Automotive Technology. By participating in this contest,

students have the opportunity to showcase their skills, gain hands-on experience, and deepen their understanding of automotive technology. This competition not only encourages students to pursue further studies in this field but also provides a platform for them to potentially become future Automotive Technicians. The winner of this contest may also have the chance to compete at the national level, representing their skills and dedication on a larger stage.

2.3. Duration of Contest

6 Hours. Competitors will begin at 9:00AM and have until 4:00PM to complete all of their tasks, including tidying their work station.

2.4. Skills and Knowledge to be Tested

The contest is designed to evaluate the participants' proficiency in various aspects of automotive technology. The competition is divided into four parts, each focusing on different skills and knowledge areas essential for an automotive mechanic.

1. **Diagnostic Challenge:** Participants will demonstrate their ability to diagnose and repair a vehicle issue using a scan tool and service information. They will follow a series of diagnostic steps, document their findings, and confirm the repair.
2. **Parts and Tools Identification Exercise:** This exercise tests participants' familiarity with common automotive parts and tools. They will identify various items displayed and demonstrate their knowledge of industry-standard components and tools.
3. **Electrical Testing Exercise:** Participants will showcase their skills in performing electrical tests on a vehicle. They will be evaluated on their adherence to safety protocols, accuracy in testing, and proper techniques.
4. **Engine Disassembly and Measurement Exercise:** In this part, participants will disassemble an engine and use precision measuring tools to measure engine components. They will document their measurements and ensure accuracy in their work.

3. EQUIPMENT, MATERIAL, CLOTHING

3.1. Equipment and material provided by Skills Canada Yukon:

- Skills Canada will provide all tools and necessary equipment to compete, except for the items listed in the required clothing section.

3.2. Required Clothing Provided by the Competitor

- CSA Approved Steel-toed boots (safety footwear)
- Coveralls or a shop coat

4. HEALTH & SAFETY

4.1. Safety Orientation

During orientation, Competitors will participate in a Safety workshop and they will be expected to work and maintain a safe working area during the competition.

List of required personal protective equipment (PPE) provided by Skills Canada Yukon:

- Safety glasses
- Gloves
- Face masks
- Hearing protection

NOTE: Competitors who do not have the required protective equipment/clothing will not be allowed to participate in the competition

4.2. Field Level Risk Assessment

SCY will complete a Field Level Risk Assessment for every competition area in addition to a full walkthrough with a representative from Yukon Workers Safety and Compensation Board to identify potential hazards and create solutions. The primary goal of an FLRA is to identify and mitigate potential risks to ensure the safety of competitors.

5. ASSESSMENT

5.1. Point Breakdown

TASK	/100
Diagnostic Challenge	/25
Parts and Tools Identification Exercise	/25
Electrical Testing Exercise	/25
Engine Disassembly and Measurement Exercise	/25

5.2. Qualifying for the Skills Canada National Competition

Competitors can secure a win in their specific competitions by demonstrating exceptional skills and abilities, and meeting or exceeding established evaluation criteria. However, qualification for the Skills Canada National Competition is not solely determined by winning at the territorial level.

The decision to advance further depends on additional factors, such as the National Technical Committee's (NTC) assessment and/or the judges' discretion,

which may take into account specific criteria beyond just event performance. These additional criteria could encompass a competitor's adherence to safety protocols, ethical conduct, teamwork, or overall professionalism, ensuring that those who represent the Territory at the national level not only excel in their technical skills but also embody the values and standards upheld by Skills Canada.

***Please note:** Not all territorial contest areas are eligible for the Skills Canada National Competition. Please refer to the SCNC website to determine if your skill area/level is eligible to compete.

6. ADDITIONAL INFORMATION

6.1. Competition Rules

Refer to the competition rules of the Skills Canada Yukon Territorial Competition which can be found on our website.

6.2. Ties

Tiebreaker #1: In the event of a tie, the candidate with the highest safety score will be declared the winner.

Tiebreaker #2: If a tie still remains, the competitor with the highest score in the Parts and Tools Identification Exercise will be declared the winner.

6.3. Accessibility & Accommodations

Skills Canada Yukon is committed to providing a barrier-free environment which allows everyone to participate in our programs and competitions. We strive to be fully inclusive to all manner of disabilities and identities. SCY provides the opportunity for any competitor to disclose a disability on our competition registration form. Requests for accommodations must be made at least 3 weeks prior to the competition date.

7. NATIONAL & TERRITORIAL TECHNICAL COMMITTEES

7.1. The Yukon Territorial Technical Committee member for Automobile Technology is Brendan Reese. Email: brendan.reese@gmail.com

7.2. Please contact yukon@skillscanada.com with questions or concerns related to the competition.