## 2021 MLR High School Contest Stations

Each Station will require: A PC-Based computer with internet and web camera will be needed to complete on-line assessments.

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<tr>
<th>TASK</th>
<th>WORKSTATIONS</th>
<th>Notes</th>
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| M1 – Written Test | Given by ASE, this 70 question (60 Scored/10 Unscored) computer-based test will test the student’s technical knowledge of automobile maintenance and light repair in the vehicle system specialty areas of:  
- Engine Repair  
- Automatic Transmission/Transaxle  
- Manual Drive Train and Axles  
- Suspension and Steering  
- Brakes  
- Electrical/Electronics  
- Heating, Ventilation, and Air Conditioning  
- Engine Performance  
- Supplemental                                                                 | **CONTESTANT REQUIREMENTS**  
- Valid email address for each contestant must be provided to the SkillsUSA AST/MLR National Committee with the State Contestant Information  
-- Contestants will receive an email with ASE testing portal login instructions; each contestant will be required to log into the ASE testing portal BEFORE the test date to create a profile (SEE AST/MLR CONTEST SCHEDULE FOR CONTESTANT TEST DATES AND TIMES).  
**NOTE:** IF YOU HAVE NOT RECEIVED THIS EMAIL BY MAY 31, 2021, CHECK YOUR JUNK/SPAM FOLDER. IF NO EMAIL HAS BEEN RECEIVED, CONTACT THE SKILLSUSA AST/MLR COMMITTEE.  
- Follow the instructions in the email. It will not be possible to create the contestant profile during the contest testing session. If you do not have your profile created at the time of your testing appointment, you will not receive credit for this contest activity. |
| **M3 - Tire Inspection (Steering and Suspension)** | **Students will demonstrate their knowledge and understanding of steering and suspension components; tire information, TPMS systems and procedures, and tire wear patterns; Tire mount, dismount, balancing, rotation, and repairs; Chassis inspections and pre-alignment inspections.** | **A computer with internet and web camera will be needed to complete an on-line assessment in this skill area.** |
| **M5 - Job Interview** | **Students demonstrate they can clearly and completely fill out a job application, communicate clearly and effectively and have appropriate professional behaviors during the job interview. Emailed copy of resume required.** | **Contestant must email resume to the contest proctor prior to Zoom.** |
| M6 - Check Fault Codes | Electude is providing a virtual competition station experience aimed at students at the MLR level. Using the Electude Engine Management Simulator, students will be able to participate in hyper-realistic interactive sessions where they make decisions in order to solve problems. At the MLR level, we provide the student with a real-life scenario that includes: reviewing the customer concern, diagnosing the problem, and solving the problem. The test will break down the problem into small steps geared to the MLR level. Students are given access to our Engine Management Simulator and a variety of interactive lessons including faults for them to practice diagnosing prior to the contest to ensure they have the chance to become familiar with the Simulator software.

Electude is providing resources for MLR students and their teachers in order to prepare for use of the Engine Management Simulator, including:
- Live webinars
- Recorded webinars
- A demo site for hands-on practice
- Worksheets for use in the competition.
Information regarding all these materials may be found at: https://www.electude.com/skills-usa/ | A computer with internet and web camera will be needed to complete an on-line assessment in this skill area. |
| M7 - Basic Electrical | Students will demonstrate proper simple circuit construction from a wiring diagram and following instructions. Also demonstrate proper use of their digital multimeter (DMM) while measuring basic resistance, current, voltage and voltage drops. Answers will need to be labeled, example: 8.1(V), 8.1 (A), or 8.1 (Ω). Students will also diagnose and troubleshoot basic circuits. | ATech Model 1810 Electricity Trainer (will be shipped to contestants school)  
**Contestant must supply their own DMM as one will not be provided**  
A computer with internet and web camera will be needed to complete an on-line assessment in this skill area. |
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<td>M8 - Service Information Diagnosis</td>
<td>Automotive computer system diagnosis using scanner code retrieval, live data and scope pattern interpretation. Basic scan-tool and Labscope operation.</td>
<td>Zeus Diagnostic and Information System (will be shipped to contestants’ school, must be returned)</td>
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<td>M9 - Safety</td>
<td>Contestants demonstrate their knowledge of automotive work-related safety equipment, environmental issues, procedures and familiarity with Safety Data Sheets (SDS) and Personal Protective Equipment (PPE). Contestants may self-enroll in the complimentary study materials by visiting: <a href="http://ccartraining.electude.com">ccartraining.electude.com</a> and logging in as a student. There are 8 anonymous usernames available named student1 through student8 (student1, student2, ...). All users have the same password: “studyhall”. Access will remain available 24/7 until the cutoff. <strong>June 7, 2021 9pm (Central time) is the cutoff for complimentary access to CCAR eSafety.</strong> Contestant’s school (or approved testing location) must have a computer equipped with a webcam, speakers and microphone supporting MS Windows 10 or macOS 10. A reliable high speed internet connection capable of supporting a live zoom meeting session while simultaneously accessing the CCAR eSafety website for contestant testing or employ 2 devices: one for webcam and one for testing. Access to the CCAR eSafety® program is provided at no-cost to competitors in the SkillsUSA Competitions. Students are encouraged (but not required) to complete the complimentary CCAR eSafety courses in advance of the competitions to assure that they are familiar with the Electude system and that their equipment functions properly in advance of the National Skills and Learning Competition. All contestants must have an email address where they can receive login credentials to access the exam and directions to the testing site for registration. Any questions, call CCAR toll free: 1-888-476-5465. ext.4</td>
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