**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Electrical/Electronics Circuit Building Project**

**Equipment**

Personal Protective Equipment (PPE)

DVOM

Test Light

Wiring Diagram

Electrical Circuit Simulator Board

Circuit Components

Wire and Connectors

**Procedure:**

1. Wear PPE while performing the procedures on this job sheet.

2. Choose one of the following circuits to reproduce on your Electrical Circuit Simulator Board.

 Window motor and door locks circuits

 Windshield wiper and washer circuits

Turn signals and hazard circuits

Heater blower motor circuit

3. Research applicable vehicle service information such as vehicle service history, VIN, certification labels, calibration decals and wiring diagrams for the vehicle and circuit chosen. Record the necessary information in the space provided.

4. Using the wiring diagram, sketch how the wiring and components will appear on the Electrical Circuit Simulator Board.

5. Use the applicable research, circuit components, wire, connectors and wiring diagrams to reproduce the electrical circuit chosen on the electrical simulator board.

6. Once you circuit has been reproduced on your electrical simulator board, power the board up and verify that the circuit and components work properly.

7. Using the test light and DVOM trace the power flow through the circuit and document your results.

8. Build a Power Point Presentation with at least 5 slides that explains the operation and power flow of your circuit.

9. Present Electrical Circuit to class using your Power Point and explain circuit operation and power flow to class.