#### ANSWER KEY TO CHALLENGE SHEET

### **COOLING SYSTEM CHALLENGE**

**Customer's Concern:** My car has been overheating for the past two weeks. I had the thermostat replaced twice, but my car still runs hot. It also is running rough.

**Customer Vehicle:** Ford Mustang.

# **Possible Causes of This Challenge:**

- 1. External leak in cooling system (hoses, radiator, or heater core).
- 2. Internal leak in cooling system (cylinder head or block cracked, or intake manifold or cylinder head gaskets leaking).
- **3.** Defective radiator cap.
- **4.** Clogged radiator.
- **5.** Defective water pump.

# **Safety First Practices to Follow:**

- 1. Wear safety glasses at all times.
- 2. Never remove the radiator cap when the engine is hot.
- **3.** Follow all safety rules when using hand tools.

# **Tools and Equipment Required:**

- **1.** Hand tools.
- 2. Combustion leak detector.
- **3.** Cooling system pressure tester.
- **4.** Thermometer.