**Automotive Electrical and Engine Performance - 9th edition**

**Ch5: Circuit Testers and Digital Meters**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Fused Jumper Wire, Test Lights, Logic Probe, Digital Multimeters, and Inductive Ammeters

2. Diode Check, Duty Cycle, and Frequency, Electrical Unit Prefixes, and How to Read Digital Meters

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**OBJECTIVES:**

1. Discuss how to safely set up and use a fused jumper wire.

2. Discuss how to safely set up and use a test light.

3. Discuss how to safely set up and use a logic probe.

4. Describe the uses of digital multimeters.

5. Describe the uses of inductive ammeters.

6. Discuss diode check and frequency.

7. Describe the prefixes used with electrical units.

8. Describe how to read digital meters. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**RESOURCES:** (All resources may be found at jameshalderman.com)

1. Task Sheet: Digital Multimeter Use for Electrical Problems

2. Task Sheet: Test Light Usage

3. Task Sheet: Circuit Testing Using a Fused Jumper Wire

4. Crossword Puzzle and Word Search

5. Videos: (A6) Electrical/Electronic Systems Videos

6. Animations: (A6) Electrical/Electronic Systems Animations

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**ACTIVITIES:**

1. Task Sheet: Digital Multimeter Use for Electrical Problems

2. Task Sheet: Test Light Usage

3. Task Sheet: Circuit Testing Using a Fused Jumper Wire

4. Chapter PowerPoint

5. Crossword Puzzle and Word Search

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**ASSIGNMENTS:**

1. Chapter crossword and word search puzzles from the website.

2. Complete end of chapter quiz from the textbook.

3. Complete multiple choice and short answer quizzes downloaded from the website.

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**CLASS DISCUSSION:**

1. Review and group discussion chapter Frequently Asked Questions and Tech Tips sections.

2. Ten (10) question end of Chapter Quiz.

3. Five (5) end of chapter Review Question for class discussion.

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**NOTES AND EVALUATION:**

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