**Electric & Hybrid Electric Vehicles 1st Edition**

**Chapter 12 – EV and PHEV Charging**

**Lesson Plan**

**CHAPTER SUMMARY:**

1. Plug-In Hybrid Electric Vehicles, Electric Vehicles, Level 1 Charging, and Level 2 Charging

2. Level 3 Charging and Owning and Charging an EV

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**OBJECTIVES:**

1. Identify a plug-in hybrid electric vehicle (PHEV).

2. Explain how the high-voltage batteries are recharged in a PHEV and EV vehicle.

3. Discuss range anxiety, battery capacity, and range correlation of an EV.

4. Explain the safety precautions using Level 1, Level 2, and Level 3 charging.

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**RESOURCES:** [(All resources may be found at jameshalderman.com)](https://jameshalderman.com/)

1. Task Sheet: Plug-In Vehicle Charging

2. Task Sheet: Plug-In Vehicle Charging Diagnosis

3. Chapter PowerPoint

4. [Crossword Puzzle and Word Search (L3)](https://jameshalderman.com/l3_puzzles_lib_page/)

5. [Videos: (L3) Light Duty Hybrid Electric](https://jameshalderman.com/l3_vid_lib_page/)

6. [Animations: (L3) Light Duty Hybrid Electric](https://jameshalderman.com/l3_anim_lib_page/)

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**ACTIVITIES:**

1. Task Sheet: Plug-In Vehicle Charging

2. Task Sheet: Plug-In Vehicle Charging Diagnosis

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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. Review and group discussion of the five (5) chapter Review Questions.

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**NOTES AND EVALUATION:**

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