

# Electric & Hybrid Electric Vehicles 1st Edition

## Chapter 3 – Health and Environmental Concerns

### Lesson Plan



#### **CHAPTER SUMMARY:**

1. Need for Electric Vehicles (EV) and Hybrid Electric Vehicles (HEV) and Ozone
  2. Ultraviolet Radiation Absorption and Health Effects of Air Pollution and Acid Rain
  3. Carbon Footprint
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#### **OBJECTIVES:**

1. Identify carbon-based fuels.
  2. Explain how ozone affects our environment.
  3. Describe how organic materials decompose into carbon-based fuels.
  4. Explain the difference between carbon-based and non-carbon-based energy sources.
  5. List alternatives to carbon-based fuels.
  6. List the factors that will be needed to reduce the carbon footprint.
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#### **RESOURCES:** ([All resources may be found at jameshalderman.com](http://www.jameshalderman.com))

1. Task Sheet: Emission and Chemical Identification
  2. Task Sheet: Emission Label Terms
  3. Chapter PowerPoint
  4. [Crossword Puzzle and Word Search \(L3\)](#)
  5. [Videos: Environmental Concerns](#)
  6. [Videos: \(L3\) Light Duty Hybrid Electric](#)
  7. [Animations: Environmental Concerns](#)
  8. [Animations: \(L3\) Light Duty Hybrid Electric](#)
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#### **ACTIVITIES:**

1. Task Sheet: Emission and Chemical Identification
  2. Task Sheet: Emission Label Terms
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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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