**Lesson Information**

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| Lesson: (3 of 5) Conduit and Raceways Length: 90 minutes  Unit: (2 of 3) System Elements  Course: Electrical |

**Content Assumptions**

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| Prior to this class, students have taken math courses. |

**Essential Questions**

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| 1. How is conduit bent by hand? With power tools? 2. How are raceway systems chosen for given applications? |

**Objectives Assessments**

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| After completing this lesson, students will be able to:   1. Demonstrate their knowledge of terms associated with conduit bending and raceway systems. 2. Select raceway systems for given applications and justify their selections. 3. Compare methods of conduit bending to select the best method for given applications. | 1. Crossword — key 2. Raceway selection rationale — rubric 3. Bending method comparison — rubric |

**Activities/Instruction**

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| **Show…** (60 minutes)  Using examples and photos (as listed in the Materials section), Instructor explains how different conduit bends are made using different tools as well as different types of raceway systems and where each is best applicable. Students take notes and complete [CONDUIT RACEWAY CROSSWORD].  **…and Tell** (30 minutes)  Using their notes and electrical drawings from the previous lesson, students choose a raceway system for their sample residences and write justifications for their choices. Then, students write comparisons of hand and power tools for bending conduit, stating where each is applicable in their chosen raceway system. |

**Materials**

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| For students:   * [CONDUIT RACEWAY CROSSWORD] * Electrical drawings for a simple residence (see previous lesson, “Boxes”)   For Instructor:   * Examples of hand and power tools used to bend conduit * Photos or samples of different conduit bends * Photos or samples of different kinds of raceway systems * [CONDUIT RACEWAY CROSSWORD KEY] * [RACEWAY RATIONALE RUBRIC] * [BENDING COMPARISON RUBRIC] |