**Lesson Information**

|  |
| --- |
| Lesson: (4 of 4) Testing Length: 90 minutes  Unit: (1 of 3) Basic Theory and Practice  Course: Electrical |

**Content Assumptions**

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

**Essential Questions**

|  |
| --- |
| 1. Why are electrical test devices used? 2. How are electrical test devices selected and operated? |

**Objectives Assessments**

|  |  |
| --- | --- |
| After completing this lesson, students will be able to:   1. Demonstrate their abilities to select and use appropriate electrical test equipment for given situations. | 1. Test equipment handbook — rubric |

**Activities/Instruction**

|  |
| --- |
| **Show and Tell** (30 minutes)  Using examples of electrical test equipment, Instructor gives a quick overview of each piece, explaing what it is used for and how it is used. During demonstrations, Instructor also explains category ratings for electrical test equipment. Students ask questions as Instructor teaches, creating a classroom dialogue.  **Research…** (30 minutes)  Instructor divides students into groups and assigns each group to a different piece of equipment (at Instructor’s discretion). Each group is to use the manual for its assigned piece of equipment as well as any Internet, classroom, or library resources deemed necessary by Instructor, to determine for its piece of equipment:   * The category rating * When to use it * How to use it * Related equipment * Safety warnings   Each group then takes this information and formats it like a handbook entry, including all relevant information in an easy-to-use manner.  **...and Development** (30 minutes)  Instructor brings groups back together and selects one student per group to give a brief (1–2 minute) overview of his/her assigned piece of equipment. As students present, Instructor facilitates a feedback discussion, making certain that all information included is correct and that no relevant information has been left out. After all groups have been represented, Instructor guides students to create a table of contents for their “handbook.” Instructor collects each group’s handbook page and copies it, creating a physical handbook for students to use as a reference. |

**Materials**

|  |
| --- |
| For students:   * User manuals for various pieces of electrical test equipment   For Instructor:   * Examples of various pieces of electrical test equipment * [HANDBOOK RUBRIC] |