**Lesson Information**

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| Lesson: (1 of 3) Tools and Equipment Length: 90 minutes  Unit: (1 of 3) Materials and Tools  Course: Masonry |

**Content Assumptions**

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

**Essential Questions**

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| 1. What makes a given tool suitable for a given application? 2. Why are trade terms used within the masonry trade? |

**Objectives Assessments**

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| After completing this lesson, students will be able to:   1. Distinguish among tools and equipment used in masonry and select suitable tools and equipment for given applications. 2. Describe the processes for assembling and disassembling scaffolds using trade and lay terminology. | 1. Tool game — Instructor observation 2. Process write-ups — checklist |

**Activities/Instruction**

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| **Be a Tool** (40 minutes)  Instructor distributes cards with the names of tools and pieces of equipment printed on them (one card per student). Instructor explains to students that when s/he calls out a characteristic, students are to group themselves according to what tools/equipment cards fit that characteristic. For example, if Instructor calls out, “Function!”, then students will group themselves according to the function of the tools/equipment on their cards — students holding “dust mask,” “goggles,” and “gloves” cards will stand together, because their cards all deal with personal protection; students holding “hammer,” “impact driver,” and “nail gun” cards will stand together, because their cards all deal with installing fasteners; and students holding “plumb bob,” “level,” and “mason’s line” cards will stand together, because their cards all deal with ensuring masonry work is true. Instructor can choose to call out a number of characteristics (e.g., safety considerations, hand/power category, multipurposeness, etc.). While the game is played, Instructor facilitates a classroom discussion of the tools, covering such topics as how to select tools and equipment for given applications, what safety considerations are relevant to which tools and equipment, and how each tool and piece of equipment is most effectively used.  **Talk the Talk** (50 minutes)  Instructor collects the cards and asks students to return to their seats, then begins a discussion of masonry “trade terms.” Instructor notes that there are multiple ways to say the same thing, and trade terms can sometimes be useful ways to shorten and clarify what a mason is trying to say. To illustrate this point, Instructor guides students to instructions for assembling a scaffold (as listed in the Materials section, another Internet resource, a classroom or library resource, or Instructor iteration). Because these instructions use trade terms, students are to rewrite the process for assembling a scaffold using lay terms. When students have finished, Instructor guides them to instructions for disassembling a scaffold (as listed in the Materials section, another Internet resource, a classroom or library resource, or Instructor iteration). Because these instructions use lay terms, students are to rewrite the process for disassembling a scaffold using trade terms. |

**Materials**

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| For students:   * http://www.thomasrental.com/images/assembly\_scaffold.pdf (Instructions for assembling a scaffold — trade terms) * http://www.iscaffold.com.cn/news/news\_1438.html (Instructions for disassembling a scaffold — lay terms)   ForInstructor:   * Cards printed with the names of tools and pieces of equipment * www.cefga.org/documents/MasonryIllustrationsofToolsandBrickPlacementterms.ppt (PowerPoint over simple masonry tools and brick placements) * http://www.masonryforlife.com/HowToBasics.htm (Guide to basic masonry tools and their uses) * [TRADE-LAY TERMS PROCESS WRITE-UP CHECKLIST] |