Teacher: Mr. Wheatley

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Deadline Date: Class: AM or PM (circle one) Cognitive Value: <u>160 points</u>



2010-2011

## **Carpentry Fundamentals Level 1**

Module: 27105-06 Floor Systems 10 Classroom Sessions @ 2.5 hours Lesson# 1 of 4 / Sections 1.0 & 3.0

• **Mastery Objective:** Upon completion of these module sections 1.0 & 3.0 students will be able to:

Identify the different types of framing systems, read and interpret drawings along with specifications to determine floor system requirements.

## • Enduring Understanding:

Residential floor framing is a standard carpentry procedure. This module covers the materials and general methods used to construct floor systems, with emphasis placed on the platform method of floor framing. Skill in floor framing is an essential one for professional carpenters.

- Essential Questions: Answer the following questions. Cognitive Value: <u>10pts. ea. = 20pts. total</u>
  - 1. What are the two types of floor framing systems?
  - 2. What type of architectural drawings has information relevant to building a floor system?

- Math Learning Activities: (math warm-ups) Cognitive Value: 20pts.
  - 1. Carpentry Math M20-1 "Estimating Floor Girders"
- Reading and Writing Learning Activities: <u>Cognitive Value: 50pts.for</u> <u>readings and participation</u> Read Pgs. 1-12 / Sections 1.0-3.0 / Class Discussion
  - 1. Complete Review Questions 1-7. **Directions:** questions are located in the text, and you must write the question and answer on a separate sheet of paper!!!
  - 2. Complete Worksheet #1
  - 3. Complete Trade Terms.
- Trade Terms: (vocabulary) <u>Cognitive Value: 10pts. ea. =70pts. total</u>
  - 1. Foundation-
  - 2. Soleplate-
  - 3. Rafter Plate-
  - 4. Let-ins -
  - 5. Fire stops-
  - 6. Piers-
  - 7. Span-
- Performance Profile Tasks: <u>Manipulative Value: Pass/Fail</u>

This is a knowledge-based section there is no performance testing.

• Summarizer/Closure:

A great majority of a carpenter's time is devoted to building floor systems. It is important that a carpenter not only be knowledgeable about both traditional and modern floor framing techniques, but, more importantly, be able to construct modern flooring systems.

## Materials and Equipment List

- Transparencies
- White board markers
- Pens and pencils
- Personal Protective Equipment (PPE)
- Floor adhesive (optional)
- Beam material
- Grout
- Plywood or OSB butt-joint panels to cover floor area
- Plywood or OSB (tongue-and-groove, 11/4") to cover floor area
- Shim materials
- Sill sealer
- Steel bridging and instructions
- Termite shield
- 236s for sills
- 2 3 10s for joists and headers
- 1 3 4s or 2 3 10s for bridging
- 8d box nails for bridging
- 8d box, screw, or ring shank nails for flooring
- 16d box nails for joists and headers
- 8d double head box nails
- Pictures, photographs, etc., showing braced, balloon, platform, and post-and-beam framing
- Sets of building working drawings and specifications
- Examples of several floor plans and specifications
- Pictures/photos of building damage that resulted from defective floor and sill framing (optional)

- Tool box consisting of standard carpenter's hand tools
- Chalkline
- Electric drill and assorted drill and flat bits
- Framing square
- Level
- 100' tape
- Power circular saw and extension cord
- Reciprocating saw
- Worksheet #1

**Instructors Notes:**