**Lesson Name**: Corner Wall Assembly Project

**Course:** Home Repair

**Grade Level:** 10-12

**Unit:** Framing

**Goals:**

Students will be able to cut 2x4 lumber using a variety of saws and accurately assemble into a small corner wall module using the correct nails.

**Objectives:**

* Be able to read a standard tape measure
* Be able to use circular and miter saws to cut lumber to accurate lengths
* Be able to nail together 2x4 lumber flush and square
* Be able to layout 16” on center stud locations using a tape measure

**Time Frame:**

* This lesson should take about 5 days

**Materials:**

* “Corner Wall Assembly” Handout and Rubric
* Miter Saw and Circular Saw
* 2X4 lumber
* Tape measure and speed square

**Procedure:**

*Day 1: Direct Instruction and Activity*

1. Go over the cut list, noting the quantity for each 2x4 piece
2. Demonstrate laying out 16” on center with Wall 1 top and bottom plates
3. Give students the rest of the class period to start cutting up their lumber

*Day 2: Lab Activity*

1. Students should be using this class period to cut their lumber

*Day 3: Assembly Demonstration & Lab Activity*

1. Start class by demonstrating how to nail together the 2x4’s to be flush and square
2. Go over the 16” on center layout, reminding them they should be measuring from the left side of their top and bottom plate.
3. Show how the California corner is assemble
4. The rest of class is lab for students to continue to cut and assemble their project

 *Day 4: Lab Activity*

* + - 1. Students should be using this class period to work on assembly

*Day 5: Finish and grading*

1. Students should be finishing up their corner wall module for evaluation

**Assessment:**

* Students should use the rubric on their handout to grade their project
* Go over the module and their rubric making sure to discuss the grade

**CORNER WALL ASSEMBLY**

1. Cut the pieces for your corner wall frame out of 2x4s and label each piece with its length, description, and your team names.

|  |  |  |
| --- | --- | --- |
| **Quantity** | **Dimension (length)** | **Description** |
| 6 | 17-½” | Stud |
| 1 | 29-½”  | Top plate W1 |
| 1 | 16” | Top plate W2 |
| 1 | 29-½” | Bottom plate W1 |
| 1 | 16” | Bottom Plate W2 |
| 1 | 33” | Double Top Plate W1 |
| 1 | 12-½” | Double Top Plate W2 |

1. Layout the plates, marking where the studs will go
2. **GET INSTRUCTOR APPROVAL** \_\_\_\_\_\_\_\_\_\_\_\_\_
3. Build Wall 1 with 16d nails. Pay attention to the 16” on center!
4. Build Wall 2 with 16d nails. Assemble the California corner with 8d nails.
5. Nail wall components together with 2 16d nails on each end of the 2X4
6. Grade completed wall module with rubric below and show to instructor

**Corner Wall Assembly Rubric**

Accuracy Cutting: 0 1 2 3 4 5

Accuracy Nailing: 0 1 2 3 4 5

Accuracy Laying Out: 0 1 2 3 4 5

Accuracy Assembling: 0 1 2 3 4 5

Followed Directions: 0 1 2 3 4 5

TOTAL POINTS: \_\_\_\_\_\_\_\_ / 25

Calculate %     Total points x 4 = \_\_\_\_\_\_\_\_ %

Letter Grade: A B C D F

Why did your team receive this grade?

Project Example:



