

**LESSON NAME**

Course Name	Grade Level	Subject Represented
Construction	10-12	Framing Unit

**GOALS:**

Students will explore how to frame a floor that is level and square.

**OBJECTIVES:**

Given a demonstration, framing tools, 2x4's, and coated sinker nails the Construction students will be able to properly frame so that it shows level and square with 90% efficiency.

**PRIORITY STANDARDS:**

- Demonstrate ability to identify and safely use hand tools commonly used by tradesmen and tradeswomen.
- Identify types and uses of exterior building materials.

**TIME FRAME:**

5 days

**MATERIALS:**

- 2x4's
- 8d and 16d nails
- 2x4's
- OSB
- Tape measure
- Level
- Speed square
- Circular saw
- hammer

**PROCEDURE:**

Day 1: Floor Framing PowerPoint and Follow Along Worksheet

Day 2: Floor framing diagram and calculation of cut list

Day 3: Cut all 2x4's to size and assemble with nails

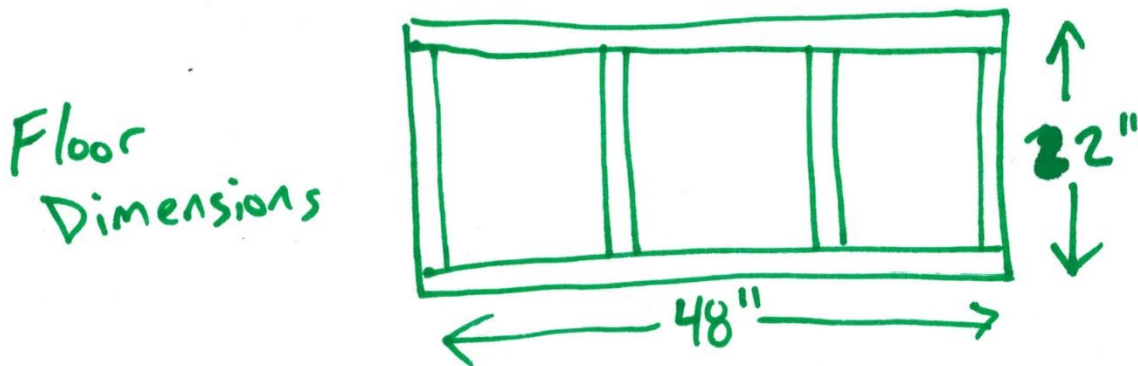
Day 4: Pythagorean theorem video and demonstration. ([Squaring Shed Floor with Pythagorean Theorem Pt. 1](#)  
[Squaring Shed Floor with Pythagorean Theorem Pt. 2](#) Demo on using a level to check for perfectly horizontal

Day 5: Utilize Pythagorean Theorem to square floor and sheet with OSB. Adjust and level floor for inspection

**ASSESSMENT:**

- Box sill floor framing project

# Floor Framing Blue print



What are the lengths of the 6 boards needed

Why are the middle joists not 22"?

What is the spacing of the joists?

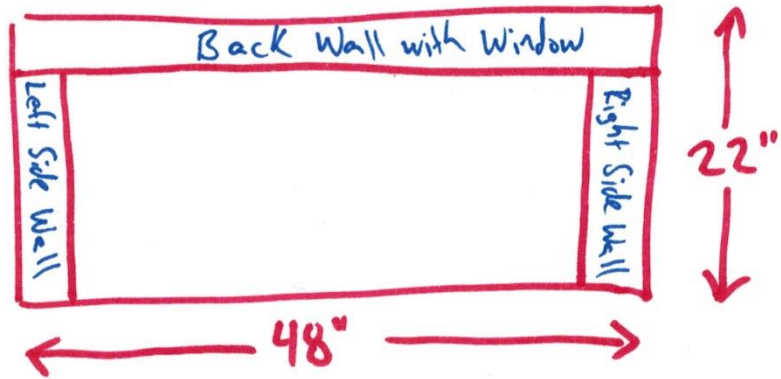
What is the 1<sup>st</sup> and 2<sup>nd</sup> measurement for this spacing?

What is the name of the sheet that covers these joists?

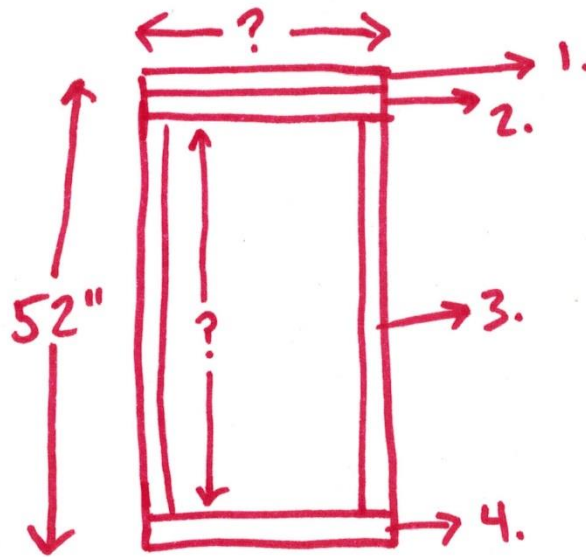
How do you check to make sure the floor is square?

# Wall Framing Blueprint

Walls Top View



Side Walls



Back Wall

Window Rough Opening  
11 1/2" x 16"

