

Estimating studs in a wall

Unit #2

Developed by: Mitchell Smith

Date: June 25, 2009

Description: We use an 8foot wall layout to estimate the number of studs needed to build a wall with one window in it.

LAB PLAN

TEACHER: Mitchell Smith

- **Lab Objective**
- Have students understand estimating compared to actual number of studs needed to build an 8-foot wall.
- **Statement of pre-requisite skills needed**
 - Understand the concept of spacing studs O.C.
 - Measuring using a tape measure to space studs
 - Estimating using the 12" rule
- **Vocabulary**
 - Estimate
 - Centering studs on 16" centers
 - Trimmer studs
 - Cripple studs
 - California corners
 - 9' long piece of tape for each person
 - Tape measure
 - Triangle or Speed Square
 - Pencil
 - Masking tape
- **Set-up information**
 - Have enough room for each student to lay out their piece of tape either on a floor or on a bench.
 - Students will be marking their tapes with pencils and triangles.
 - The masking tape needs to be able to stick to the surface.
- **Lab organization** Have students either work individually or in teams of two.
- **Time:** This lab should take one class period.
- **Teacher Assessment of student learning:** Compare the student's walls with the key.
 - Check the reasonableness of the student's estimate to the actual studs needed for the wall

- **Summary of learning?**
 - Write a paragraph explaining if your estimate was accurate. Answer the following questions.
 - Was your estimate more or less than the actual studs needed for the wall? Did you expect this? Why
 - Is estimating an accurate way to order studs? What other factors might you take into account when estimating studs

- **Optional activities:** Have students estimate the total number of studs needed for the house.
- **Career Applications** Carpenters need to estimate materials needed for building projects.
- Lumber salespeople need to be able to estimate materials for take-off bids.

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LAB TITLE: _____

STUDENT INSTRUCTIONS:

- **Statement of problem addressed by lab**

- **Grouping instructions and roles**

- **Procedures** – steps to follow/instructions

- **Outcome instructions**

- **Assessment instructions** (peer-teacher)

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Lab Data Collection

Student: _____ Date: _____

Unit: _____

Lab Title:

Criteria: Write the problem/objective in statement form

Data Collection: Record the collected/given data

Calculations: Complete the given calculations to solve for an answer(s)

Summary Statement:

Other Assessment(s)

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