Lab Framework

Text: CORD/AMME(Integrated into all units) CORD-Unit 2, 8 AMME-Unit 3, 5.

Short Description: To assist students in learning how to work with three dimensional drawings and estimating cost of remodeling a room.

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<u>Lab Title</u> "Do My Room!"

LAB PLAN

TEACHER: Teacher Prep/ Lesson Plan

• Lab Objective

To be able to read three dimensional drawings and estimate cost of materials to remodel teacher's room.

- Statement of pre-requisite skills needed (i.e., vocabulary, formulas, etc.) Knowledge of decimals, monetary values, Algebraic functions, knowledge of interpreting three dimensional drawings.
- Vocabulary Amount, Total, Square Feet, Square Yards.
- Materials List Whiteboard and markers, calculator.
- State Standards addressed Math: A1.6.B, A1.8.A, A1.8.B, A1.8.E.
- Leadership Skills Group collaboration, practice for team and math related competitive events.

SCAN Skills/Workplace Skills

Collection of data and analysis in Construction Occupations.

Set-up information

Organize students to set up in groups of two or individually.

• Lab organization(-Grouping/leadership opportunities/cooperative learning expectations; -Timeline required)

Students will work on this lab which can be done in one period.

- Teacher Assessment of student learning (scoring guide, rubric) Students will turn in their lab worksheets with their recorded data and completed Cost Sheet.
- Summary of learning (to be finished after student completes lab)
 - -discuss real world application of learning from lab
 - -opportunity for students to share/present learning

• Optional activities

Discuss possible remodel ideas for student's rooms at home.

• Career Applications

How data is collect and used in the Building and Trades field.

LAB TITLE: "Do My Room!" STUDENT INSTRUCTIONS:

• Statement of problem addressed by lab

To compute data and complete the total cost of materials.

• Grouping instructions and roles

Students can help each other collect the data.

Procedures – steps to follow/instructions

Students will compute calculations on the dimensions given for a room and determine the total cost to remodel the room.

• Outcome instructions

Students will take the data and determine what the total cost will be with the list of given materials.

• Assessment instructions (peer-teacher)

Students will turn in worksheet with cost amounts.

Math Council

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Lab Data Collection

Student:

Date: _____

Unit: 1

Lab Title: "Do My Room!"

Criteria: Write the problem/objective in statement form

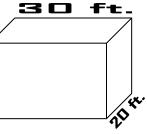
How much will it cost to remodel my room?

Data Collection: Record the collected/given data

You will be remodeling your teacher's room. The room is 8' tall and 20' x 30'. You will be replacing the sheetrock in the room, painting the room, and replacing the carpeting. Using the chart below, determine the total cost of remodeling the room, you will need to buy sheetrock, sheetrock tape (1), sheetrock mud (1), paint (1 can will cover 400 sq ft), and carpeting:

REMODEL COST CHART

| MATERIAL | QTY | COST/ITEM | TOTAL COST | 30 |
|------------------------|-----|---------------|------------|-------|
| Sheetrock | | \$10.50/sheet | | |
| Sheetrock tape | | \$5.00/roll | |] |
| Sheetrock mud | | \$5.00/can | | انب [|
| Paint | | \$9.50/gal | |] \ |
| Carpeting | | \$9.00/sq yd | | |
| TOTAL COST FOR REMODEL | | | | |



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

Determine total square feet of floor: Determine total square feet of walls:

Summary Statement:

What did you learn from this project?

How will you use this information or not and why?

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