

Lab Framework

Text:CORD Classic

Unit number and title: Unit 7: Working with Shapes in Two Dimensions

Developed by: Ryan Alexander

Date: 6-26-07

Lab Title

Board Footage and Job Costing

Contact Information: Eisenhower High School, Yakima Wa.

Short Description: Students cut logs on a mill and calculate the board footage.

LAB PLAN

TEACHER: Teacher Prep/ Lesson Plan

- **Lab Objective**
 - To Calculate the area of board material and cost per footage
- **Statement of pre-requisite skills needed** (i.e., vocabulary, measurement techniques, formulas, etc.)
 - length , width, depth, area, thickness, saw mill, band saw
- **New Vocabulary**
 - cost of material, lineal footage, board footage,
- **Materials List**
 - tape measure, saw mill, pencil, paper, wood
- **GLEs addressed**
 - Math: measuring, use of fractions, finding area, ability to multiply and add, using geometric shapes, algebra,
 - Reading: ability to understand directions, follow a written instructional plan
 - Writing: ability to communicate outcome of lab
- **Leadership Skills**
 - understand safety, direct other students, work independently**
- **SCAN Skills**
 - Provide basic computations
- **Set-up information**
 - paper, pencil, tape measure, ability to measure
- **Lab organization**(-Grouping/leadership opportunities/cooperative learning expectations; **-Timeline required**)
 - at end of week
- **Teacher Assessment of student learning** (scoring guide, rubric)
 - teacher overview of product assessed
- **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**

- **Career Applications**
 - Mill worker, construction, hardware retailer

LAB TITLE: Price costing lab

STUDENT INSTRUCTIONS:

- **Statement of problem addressed by lab**
cutting material, finding board footage, pricing material
- **Grouping instructions and roles**
cut 1" slab off of log on mill, measure width and length, divide by 12", cost out material for \$.25 a board foot and real world price a board foot depending on material.
- **Procedures** – steps to follow/instructions
see instructions above
- **Outcome instructions**
note price costing of real world expense
- **Assessment instructions** (peer-teacher)
grading will be assessed by accuracy of measuring, cutting and math calculations

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)