Lab Framework

Text:Cord

Unit number and title: Are Your Prices Right?? Unit 2

Short Description: A lab allowing the students to use estimating, guessing, rounding and truncating.

Developed by: Shane Bird

Contact Information: (Your contact information for clarification)

Date:6/24/09

<u>Lab Title</u> Are Your Prices Right?????

LAB PLAN

TEACHER: Teacher Prep/Lesson Plan

Lab Objective

To see if students can use prior knowledge and estimation, rounding, and percents to formulate a close "guess".

• Statement of pre-requisite skills needed (i.e., vocabulary, measurement techniques, formulas, etc.)

Knowledge of multiplication, adding and subtracting, percents, rounding and estimating.

Vocabulary

Estimate, formulate, truncate, round

Materials List

Paper, Pencil, Calculator-A BIG eraser!

State Standards addressed

Math: A2.1.A. A1.6.B. A1.8.C

Reading: (Reading)
Writing: (Writing)

Group Work-team work, Planning, Being able to delegate.

- SCAN Skills/Workplace Skills
- Set-up information

Hand outs or overhead with the problem and expectations of the lab.

Make sure on overhead for daily activities that students are aware of what they need out on their table. SWBAT

- **Lab organization**(-Grouping/leadership opportunities/cooperative learning expectations; -**Timeline required**)
 - 1. Students choose group-of 3 (2 minutes)
 - 2. Students choose within their group a stenographer. (1 minute)
 - 3. Each person in group will come up with their own estimate. Group decides on most reasonable estimate and presents to class (could be 1 period or more)
 - 4. Group's work to be presented to calss, with reasoning.
- Teacher Assessment of student learning (scoring guide, rubric)
 - 1. Collect work from students
 - 2. Class discussion on how they solved their problem-student volunteers.

- 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
 - 1. What are the real world applications for this lab? Discuss.
- 2. Discuss how working in a group is similar to working in a real life job, solving problems with co-workers, making estimations on the job or in real life.
- 3. Discuss the issue if an estimate is too low or too high and the possible consequences of such a miscalculation.

Optional activities

Could create a price list.

Could use with unit 1, Estimation, estimating hours needed to complete project, and estimated costs for the job.

- Career Applications
 - 1. Most professions and jobs need estimation.
 - 2. Can use the methods for chores at home, to estimating how much time you have to finish your homework before your friends come over.

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LAB TITLE: <u>Are Your Prices Right??????</u> STUDENT INSTRUCTIONS:

• Statement of problem addressed by lab

You have to purchase 8 gifts for members of your family. You have \$100.00 to spend. By looking at the add, with the prices blacked out, can you estimate 8 items that will cost you less than \$100.00 when added together. Don't forget to add for 10% tax on the total.

Grouping instructions and roles

Class will have 2 minutes to choose a group of three. Each student is responsible to show work, with the final group estimation to be presented to class.

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

Each person in the group will need to choose 8 items and estimate the cost of each item. After doing so, the group will look at each others' estimations and decide on the most reasonable cost estimations for each item. They need to add them together and add 10% to the total for taxes. The group will then present their findings to the class.

• Outcome instructions

You should have one bid for the homeowner.

• Assessment instructions (peer-teacher)

Mr. B will be walking around and observing and helping as necessary. He will also be laughing at your estimations. We will look at the actual ad after the lab and discuss the importance of being able to make good estimations, usually based on prior knowledge.

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Lab Data Collection

| Student: | Date: |
|---|--------------------------|
| Unit: | |
| Lab Title: Criteria: Write the problem/objective in statem | nent form |
| Data Collection: Record the collected/given data | |
| Calculations: Complete the given calculations t | o solve for an answer(s) |
| Summary Statement: | |
| Other Assessment(s) | |
| | |

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