Cross References to Unit(s)/Concepts

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Lab Framework

Lab Title

Submitted by: Rodger Reid, Roger Records, Terri Bader, Tom Turner
Short Description: Unit B, Percentages

LAB PLAN

TEACHER: Teacher Prep/ Lesson Plan

- Lab Objective
  The student will be able to convert whole number results to fractions and percents.
- Statement of pre-requisite skills needed (i.e., vocabulary, measurement techniques, formulas, etc.)
  how to convert whole numbers to fractions
  how to converts fractions to percents
  how to measure distances

- New Vocabulary
  Percent, fraction, demominator, numerator

- Materials List
  trash can
  scraps of paper
  pencil
  calculator
  masking tape

- GLEs addressed
  Math:
  1.1.6 Apply strategies to compute fluently with rational numbers in all forms, including whole number exponents.
  2.2.2 Apply mathematical tools to solve the problem.
  4.2.1 Analyze mathematical information to organize, clarify, and refine an argument.

Writing:
2.2.1 Demonstrates understanding of different purposes of writing.
3.1.1 Analyzes ides, selects a manageable topic, and elaborates using specific, relevant details and /or examples.

- Set-up information
  You will need various trashcans and paper; you will need to have room for the lab.
- Lab organization(-Grouping/leadership opportunities/cooperative learning expectations; -**Timeline required)**
  Students will be sharing trashcans and helping each other with tabulation. Assigned students will need to do measurement and marking of free-throw line.
- Teacher Assessment of student learning(scoring guide,rubric)
  Student's worksheet
  Assessment of participation during lab
- Summary of learning(to be finished after student completes lab)
  -discuss real world application of learning from lab
  -opportunity for student to share/present learning

Students will discuss knowledge of basketball. They will need to know free-throw line distance and then decide on distance needed for their "Free Throw line"

- Optional activities
  You may choose to use real basketballs and courts for this lab.
- Career Applications
  The ability to convert numbers to their various forms is foundational in numerous occupations requiring computational skills. Such as: Construction, Banking, Finace, Retail, etc.

LAB TITLE: **Trash Can Basketball**
STUDENT INSTRUCTIONS:

- Statement of problem addressed by lab
  You are trying out for the paper wad throwing team. You will throw five paper wads per round at the trash can and record your hits and misses.

- Grouping instructions – roles
  You will be divided into groups of five. You are expected to record the results of others in your group.

- Procedures – steps to follow/instructions
  1. The class will need to decide on free-throw distance. Distance will need to be measured and marked for all trashcans.
  2. You wil need to wad up five sheets of paper.
  3. Throw five wads at the can and record your results.
  4. Record the results for the rest of your group.
  5. Calculate your individual statistics.
  6. Project your results for 25 and 75 shots.
  7. Pick your dream team from the class results and justify your answer.

- Outcome instructions
  1. Complete your worksheet.
  2. Compare your results to others in the class.

- Assessment instructions(peer-teacher)
  1. Your worksheet will be collected and checked.
  2. Your participation will be monitored during the lab.

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)