

Lab Framework

Text: AMME

Unit number and title: Unit 1 Applied Math Rules

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HOW TALL ARE YOU?

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Short Description: The students will stand with their back to a wall and another student take a ruler and mark their height. Once all the students have been measured each student will record all the data and convert feet and inches to centimeters. Students will also determine the average height of their group and average height of females compared to males. They will record all class data on a graph and look for any trends.

LAB PLAN

TEACHER: Teacher Prep/ Lesson Plan

Lab Objective

Student will measure and convert English to Metrics as well as calculate the class average height.

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

Students must familiar with reading a ruler in both inches and centimeters.

New Vocabulary

Average

Materials List

Measuring tapes

GLEs addressed

Math: 1.2.3. Apply unit conversions within measurement systems, U.S. or metric, to maintain an appropriate level of precision. (Math) 4.2.1 Organize, clarify, and refine mathematical information relevant to a given purpose.

Reading: (Reading)

Writing: (Writing)

Leadership Skills

1.4 The students will be involved in activities that require applying communication skills with their peers

SCAN Skills

Writing

Communicate thoughts, information, and messages in writing

Record information completely and accurately

Arithmetic

Performs basic computations

Use a tape measure to determine heights

Mathematics

Approaches problem using a variety of operation

Speaking

A. Organizes ideas and communicates oral messages

Set-up information

After students have recored all the heights of the students in their groups they will then find the average height of their group. They will compare their findings and determine which group has the tallest average. They will also take the data from the whole class and chart each students height on an graph.

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

1 Classroom period 55 min. Students should be organized into radom groups with 5 or 6 students per group.

Teacher Assessment of student learning (scoring guide, rubric)

Successful completion of the task along with data worksheets.

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

Students could measure different objects with in the classroom.

Career Applications

Measurement of one type or another are used in vitually every job. Students will gain skills in precision measurment tools. English to Metric and calculate the averages.

<https://wa-appliedmath.org/>

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)

Washington Applied Math Council

<https://wa-appliedmath.org/>

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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