### Lab Framework

#### **Text: CORD**

Unit number and title: Unit 3: Measuring in English and Metric Units

Short Description: Unit 3: Measuring the distance between schools

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#### Lab Title

## **Unit 3: Measuring from CHS to TMS**

## LAB PLAN

TEACHER: Teacher Prep/ Lesson Plan

- Lab Objective Using measure of a persons step, to determine the measure in miles between two locations.
- Statement of pre-requisite skills needed (i.e., vocabulary, measurement techniques, formulas, etc.)

Understanding measurement vocabulary and conversion from feet to yards to miles

• Vocabulary

#### • Materials List

Football Field or Commons with 1 foot square blocks or Any known distance.

#### GLEs (State Standards) addressed

Math: 1.2.3 Apply unit conversions within measurement systems, U.S. or metric, to maintain an appropriate level of precision.

1.2.6 Understand and apply estimation strategies to obtain reasonable measurements at an appropriate level of precision

2.1.1 Formulate questions to be answered to solve a problem

3.2.1 Draw and support conclusions, using inductive or deductive reasoning

Reading: Writing:

• Leadership Skills

**2.7** The student will demonstrate the ability to train others to understand the established rules and expectations, rationale, and consequences and to follow those rules and expectations.

**2.8** The student will demonstrate the ability to incorporate and utilize the principles of group dynamics in a variety of settings.

• SCAN Skills/Workplace Skills

Reading: Understands instructions and interprets data

Writing: Communicates thoughts, ideas, information and data in writing.

Mathematics: Performs mathematical operations such as finding area,

multiplying, dividing, adding, subtracting and estimating.

Listening: Understands verbal cues and instructions.

Participation: Works well in a cooperative learning team, adding valuable input to the success of the lab.

• Set-up information

Required is a marked football field, track, measured hallway, commons with known length tiles, measuring tape, etc.

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

Students will work in teams of two

- **Teacher Assessment of student learning** (scoring guide, rubric) Students will be scored on participation. Students will be scored on the accurateness of their final answer
  - **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

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-decide how much the measurement changes or doesn't change according to who is doing the measurement.

#### • Optional activities

Use the measuring tools of a student's steps to measure the total area of the school parking lot or a field

#### • Career Applications

Construction estimator, Carpenter

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#### LAB TITLE: <u>Unit 3: Measurement</u> STUDENT INSTRUCTIONS:

• Statement of problem addressed by lab

Find the distance in individual steps from CHS to TMS.

- Grouping instructions and roles
  - You will work in groups of 2.

Each group will have one scribe and one presenter.

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

Using the Football field, count your steps needed to cover the distance from one goal line to the other goal line. Do this three times to ensure an accurate average.

Using the internet, find the actual distance from CHS to TMS.

#### • Outcome instructions

Using measure conversions, determine how many steps it will take for you to walk from CHS to TMS.

• Assessment instructions (peer-teacher)

# Council

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## Lab Data Collection

Student:	Date:
Unit: Lab Title: Criteria: Write the problem/objective in stateme	ent 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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