

Lab Template

Text: Cord

Unit number: 17 Title of unit: Graphing Data

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Attach the Following Documents:

- 1. Lab Instructions**
- 2. Student Handout(s)**
- 3. Rubric and/or Assessment Tool**

Short Description (Be sure to include where in your unit this lab takes place):

We are going to measure 3 different sets of stairs around East Valley High School. The first one is right outside of my room, 130. We will then measure the stairs going down to the gymnasium locker rooms. Finally, we will measure the big gym stairs going down from the landing to the floor. These are three different sets, with different landing areas which will create a different look at modified slope.

Stairway to ?????

LAB PLAN

TEACHER: *(Teacher Prep/Lab Plan)*

- ⤴ **Lab Objective** – Students will work on measuring lengths and heights. They will then graph them and then connect those points. Finally, they will draw a line of best fit to look at the slope from the top of the stairway to the floor. Students will work initially in groups to for cooperative learning.
- ⤴ **Statement of prerequisite skills needed** *(Vocabulary, Measurement Techniques, Formulas, etc.)* Measuring skills – students must be able to measure using centimeters to the tenth of a centimeter, write equations in slope intercept form, and write equations in standard form.
- ⤴ **Vocabulary** – slope intercept form, direct variation, ordered pairs, line of best fit, slope, rise over run.
- ⤴ **State Standards addressed:** *(Highlight “Green” Standards, you may use your District's Power Standards if applicable)*
 - ⤴ **Math:** A.1.6.B – Make valid inferences and draw conclusions based on data.
 - ⤴ A.1.4.A (partial) Write and solve linear equations and inequalities in one variable.
 - ⤴ **Writing: 3.3** – Knows and applies writing conventions appropriate for the grade level.

Scoring Rubric

Name _____

Stairway to ??????????

Points

Collect data - record the ordered pairs for all three stairways chosen to collect data.	15
Graph each stairway 5 points for each graph	15
Line of fit for each graph	6
Title each graph	6
Label axis	6
Slope intercept form for each stairway	6
Standard form for each stairway	6
Summary	10
Total	70

Stairway location _____

Stair number	Distance across	Distance down
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Top		
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		

Stairway location _____

Stair number	Distance across	Distance down
Top		
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		
13.		
14.		
15.		
16.		
17.		
18.		
19.		
20.		