

AGI	Regal Coller	Week of 9-19-16
Day	In Class	Assignments
<p style="text-align: center;">Tuesday 9/20</p> <p>Problem 1.1</p> <ul style="list-style-type: none"> <input type="checkbox"/> two geoboards of the same thickness (keep covers on them) <input type="checkbox"/> small paper cups <input type="checkbox"/> approximately 50 pennies per group <input type="checkbox"/> 11×4.25-inch strips of paper <input type="checkbox"/> graph paper (one per person) <input type="checkbox"/> spiral notebook <input type="checkbox"/> ruler (one per group) 	<p>Focus Question: How would you describe the relationship between bridge strength and bridge thickness?</p> <p>Assessment FOR Learning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Squares to Stairs CER poster gallery walk--friendly critics <input type="checkbox"/> Introduction to the text (TWMM) <input type="checkbox"/> Spiral notebook table of contents & page numbers <input type="checkbox"/> How to label your assignments in your spiral for classwork <p>TWMM Problem 1.1 (p. 8-9 A-E)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Vocabulary (back of agenda) <input type="checkbox"/> Launch video: Bridges! <input type="checkbox"/> Explore: Problem 1.1--Work with your seat partner. <input type="checkbox"/> Summarize as a class <p>Reflection Questions:</p> <ol style="list-style-type: none"> 1. How would you describe the relationship between bridge length and bridge strength as revealed by your experiment? 2. How is this relationship shown in your graph? 	<ul style="list-style-type: none"> <input type="checkbox"/> Complete any work not completed in class. (Due Th) <input type="checkbox"/> How to label LINED PAPER for homework (not in your spiral notebook!). <input type="checkbox"/> Required ACE assignment (Due Th): p. 16 #2 p. 19 #7-8 p. 20-22 #10-15 <p>Requirements--All graphs should have:</p> <ul style="list-style-type: none"> • axis labels (with units) • origin • consistent intervals • descriptive title • correctly placed data points <p>Do NOT break your intervals on your axes.</p>
<p style="text-align: center;">Thursday 9/22</p> <p>Problem 1.2</p> <ul style="list-style-type: none"> <input type="checkbox"/> two geoboards of the same thickness (keep covers on them) <input type="checkbox"/> small paper cup <input type="checkbox"/> approx. 50 pennies per group <input type="checkbox"/> 11×4.25-inch strips of paper--measure and cut to lengths indicated (4,6,8,9, & 11 inches) <input type="checkbox"/> graph paper (one per person) <input type="checkbox"/> spiral notebook <input type="checkbox"/> rulers (one per person) <input type="checkbox"/> scissors (one per person) 	<p>Focus Question: How would you describe the relationship between bridge strength and bridge length?</p> <p>Assessment FOR Learning:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Check and make corrections to your homework <p>TWMM Problem 1.2 (p. 10-11 A-D)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Launch: More about bridges <input type="checkbox"/> Explore: Problem 1.2--Work with your seat partner. <input type="checkbox"/> Summarize as a class--accountable talk <input type="checkbox"/> Vocabulary (back of agenda) <input type="checkbox"/> Compare and contrast graphs from 1.1 and 1.2 <p>Reflection Questions:</p> <ol style="list-style-type: none"> 1. How can you tell from your data table whether the graph of the data will be linear or not? 2. What would it mean in this situation if the your data points were on or below the x-axis? 3. Would that make sense? Why or why not? 	<ul style="list-style-type: none"> <input type="checkbox"/> Complete any work not completed in class. (Due Fri) <input type="checkbox"/> Required ACE assignment (Due Tu): p. 15 #1 p. 20 #9 p. 22-23 #16-26 p. 25 #33

Friday 9/23	Focus Question: How can you describe the relationship between two quantities by analyzing a graph? Assessment FOR Learning: <ul style="list-style-type: none"><input type="checkbox"/> TWMM 1 ACE #35--Work with your seat partner.<input type="checkbox"/> Weekly learning check--GoogleForm link sent via email	<ul style="list-style-type: none"><input type="checkbox"/> Finish any work not completed in class. (Due Tu)<input type="checkbox"/> Have a great weekend!
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Vocabulary Format (TIP = Term + Information/Definition + Example)

Tuesday

Problem 1.1--

- Independent variable
- Dependent variable
- Axis (Axes plural)
- Ordered pair
- Coordinate plane
- Quadrants (in the coordinate plane)
- Origin
- Scatterplot
- Discrete data
- Linear relationship
- Outlier

Problem 1.2--

- Non-linear relationship

For your exploration:

[Bridges: How Stuff Works](#)

Math Content Standards:

N-Q.A.1 Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.

N-Q.A.2 Define appropriate quantities for the purpose of descriptive modeling.

F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.

F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.

F-IF.C.9 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).

F-LE.A.1b Recognize situations in which one quantity changes at a constant rate per unit interval relative to another.

Math Practice Standards:

2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
6. Attend to precision.
7. Look for a make use of structure.