

Integrated II Unit 4: Bivariate Data

Universal Essential Question: Why is resilience crucial for success?

Essential Question: How do mathematical relationships help us make sense of the world?

Learning Objectives	Self-Rating, what you understand/don't yet understand and (last column only) how you learned it		
At the completion of this unit, I should ...	0 – I have no idea. 1 – I cannot solve problems yet but I am beginning to understand the strategies 2 – I can solve problems but do not yet know why the math works. 3 – I understand why the math works and can solve most problems but still make mistakes. 4 – I understand why the math works and can consistently and accurately solve problems.		
Know			
– The properties of a scatter plot			
– How to write the equation of a line from a scatterplot			
– Vocabulary associated with bivariate data			
Be able to			
– Create a scatterplot			
– Identify a type of function that could be used to model the scatterplot			
– Determine a line of best fit for an approximately linear scatterplot			
– Use technology to determine a regression equation for a linear or exponential scatterplot			
– Identify the correlation for a linear scatterplot			
– Interpret a correlation coefficient of a linear scatterplot			
Understand			
– The relationship between a scatter plot and the line of best fit			

Vocabulary of bivariate data

Scatterplot
 Bivariate data
 Line of best fit

Regression equation
 Correlation coefficient

Reflection page

1. Top 10 List

Make a top 10 list about bivariate data. Generally, top 10 lists count down. Each entry in the top 10 list can create a broader, more vivid (and slightly silly) picture of the math concepts you're addressing. You can mix silly and serious information together. Pick an enticing title to get us to read your list. (Hint: Your top 10 list will get stronger the more you mix serious information with silly information. Your serious information is the straight man to your comedic silly information.)

Example:

Top 10 Reasons to be the number 10 (from *Wacky We-Search Reports*, Barry Lane)

10. Zero would be my friend and always save a place for me.
9. I'd help people count on their fingers.
8. I'd be the base of the decimal system.
7. I'd be a whole number.
6. I'd divide millions.
5. I wouldn't have to get even.
4. The Romans would rate me X.
3. The Babylonians would ignore me.
2. The Greeks would fear me.

And the number one reason why I want to be the number 10 is

THE WHOLE WORLD COUNTS ON ME

2. Describe how the mathematics of this unit can be used to help us make sense of the world.