## Bivariate Data

## Why are we studying this?

In this unit we will look more closely at using models to compare sports statistics, opening weekends for movies, population growth, depreciation, and even the relationship between our grades and how much we text!

Building models, involving two different quantities or variables opens students to real-world problem solving. They begin to learn how to analyze and interpret data by finding the lines of best fit, using two-way tables or other methods involving quantities (known as bivariate data.) In future courses students will extend this type of problem solving using more sophisticated models.

Sample question we will be able to answer: Is there a relationship between the heights and arm spans of the students in our class? If there is a relationship, what type of association does it represent?


Real World Applications in this Unit

- Entertainment

Statistics

- Sports Statistics
- Grades
- Height v. Arm Span

Math Topics Addressed in this Unit:
-Constructing and Interpreting Scatter Plots
-Constructing Lines of Best Fit
-Assessing the Model of Best Fit
-Constructing and Interpreting Frequency in TwoWay Tables

## Dear Student \& Parent/Guardian,

This unit is an extension of the prior unit, where we learned to graph and interpret linear equations. In this unit we will look closer at real-world applications by collecting and analyzing bivariate data, such as measuring our arm spans versus our heights. To analyze the data we will construct a line of best fit and assess our model for accuracy and determine if there is a relationship between these two quantities.
-AUHSD Math Teachers

What relationship do you see between GPA (grade point average) and the number of text messages sent in a day?


## A Note About Homework:

Homework in this unit will focus on concepts learned prior units, necessary for success in Math Two, as well as current topics of writing equations and extending patterns. Topics include:
-Evaluating Expressions
-Identifying Functions
-Finding Slope
-Creating Scatter Plots
-Working with Bivariate Data

