## Cocalico School District Year-at-a-Glance - Curriculum Overview

Department: Math Course: Statistics (140) Grade Level: 11-12

## **Big Ideas**

- Analyze data to make inferences about the population.
- Calculate the probability of an event occurring given sample data.
- Estimate population parameters for one and two sample confidence intervals.
- Test claims about one and two sample tests.
- Calculate the correlation of coefficient and regression equation for a linear function.

Units of Study	% of Course Time	Textbooks & Supplemental Materials	Assessments	Standards Addressed
Vocabulary	6%	<ul> <li>Elementary Statistics         Textbook</li> <li>Supplementary Videos</li> </ul>	Test     Survey Project	<ul><li>2.5.11B</li><li>2.5.11C</li><li>2.5.11D</li><li>2.6.22E</li></ul>
Descriptive Statistics	15%	<ul> <li>Elementary Statistics         Textbook</li> <li>Graphing Calculator,</li> <li>Supplementary Videos</li> </ul>	<ul><li> Quiz</li><li> Test</li><li> Analyzing Survey Project</li></ul>	• 2.5.11.C • 2.6.11A
Probability	12%	<ul> <li>Elementary Statistics         Textbook</li> <li>Graphing Calculator</li> <li>Supplementary Videos</li> </ul>	<ul><li>Quiz</li><li>Test</li><li>Penny Lab</li></ul>	• 2.7.11A • 2.7.11B • 2.7.11C • 2.7.11D • 2.7.11E
Probability Distributions	22%	<ul> <li>Elementary Statistics         Textbook</li> <li>Graphing Calculator,</li> <li>Supplementary Videos</li> </ul>	<ul><li> Tests</li><li> Penny Lab Continued</li><li> M&amp;M Lab</li></ul>	• 2.6.11I • 2.7.11D
Confidence Intervals	18%	<ul> <li>Elementary Statistics         Textbook</li> <li>Graphing Calculator,</li> <li>Supplementary Videos</li> </ul>	<ul><li> Test</li><li> Bean Lab</li><li> Survey Analysis Project</li></ul>	• 2.6.11D • 2.6.11H
Hypothesis Testing	21%	<ul> <li>Elementary Statistics         Textbook</li> <li>Graphing Calculator</li> <li>Supplementary Videos</li> </ul>	<ul><li> Quiz</li><li> Test</li><li> Skittles Lab</li><li> Bean Lab</li></ul>	• 2.6.11H • 2.6.11I
Regression Equations	6%	<ul> <li>Elementary Statistics         Textbook</li> <li>Graphing Calculator,</li> <li>Supplementary Videos</li> </ul>	Test	• 2.6.11C



## **Eagle P.A.C.T. Course Connections:**

The purpose of this course is to have students think critically about data. Students will learn how to calculate statistical values and interpret their meaning. They will also learn to question whether or not the statistics are accurately represented in research and news articles.

Updated: 11/8/22