## Cocalico School District

Year-at-a-Glance - Curriculum Overview

## Department: Math

Course: Algebra 1B
Grade Level: 8

## Big Ideas

- To learn and explore the 4 main focus areas of $8^{\text {th }}$ grade mathematics: numbers and operations, algebraic concepts, geometry, and measurement, data, and probability
- Students will learn how to solve and graph inequalities on a number line and coordinate plane, solve absolute value equations and inequalities, polynomial factoring, piece-wise functions, simplifying square roots, and domain and range

| Units of Study | \% of Course Time |  <br> Supplemental Materials | Assessments | Standards Addressed |
| :---: | :---: | :---: | :---: | :---: |
| - Real Numbers | 5\% | - BI Blue Book Chap. 7 | - Tests or Quizzes | $\begin{aligned} & \text { - CC.2.1.8.E.1,4 } \\ & \text { - CC.2.3.8.A. } \\ & \text { - CC.2.1.HS.F. } 2 \\ & \hline \end{aligned}$ |
| - Equations | 10\% | - BI Blue Book Chap. 1 <br> - BI Algebra 1 Chap. 1 | - Tests or Quizzes | - CC.2.2.8.B.2-3 <br> - CC.2.2.HS.D.8-9 |
| - Exponents | 5\% | - BI Blue Book Chap. 10 <br> - BI Algebra1 Chap. 6 | - Tests or Quizzes | - CC.2.2.8.B. 1 <br> - CC.2.1.HS.F. 1 |
| - Pythagorean Theorem | 5\% | - BI Blue Book Chap. 7 <br> - BI Algebra1 Chap. 10 | - Tests or Quizzes | - CC.2.1.8.E.1,4 <br> - CC.2.3.8.A. 3 |
| - Volume and Similar Solids | 5\% | - BI Blue Book Chap. 8 | - Tests or Quizzes | - CC.2.3.8.A. 1 |
| - Graphing and Writing Linear Equations | 15\% | - BI Blue Book Chap. 4 <br> - BI Algebra1 Chap. 2 | - Tests or Quizzes | - CC.2.2.8.B. 2 <br> - CC.2.2.HS.D. 10 |
| - Inequalities | 15\% | - BI Algebra 1 Chap. 3 | - Tests or Quizzes | - CC.2.2.HS.D. 7 <br> - CC.2.2.HS.D. 10 |
| - Functions | 10\% | - BI Blue Book Chap. 6 <br> - BI Algebra 1 Chap. 6 | - Tests or Quizzes | - CC.2.2.8.C.1-2 <br> - CC.2.2.HS.C.1-3,6 |
| - Systems of Linear Equations | 10\% | - BI Blue Book Chap. 5 <br> - BI Algebra1 Chap. 4 | - Tests or Quizzes | - CC.2.2.8.B.2-3 <br> - CC.2.2.HS.D. 10 |
| - Data Analysis and Displays | 5\% | - BI Blue Book Chap. 9 <br> - BI Algebra 1 Chap. 12 | - Tests or Quizzes | - CC.2.4.8.B.1-2 <br> - CC.2.4.HS.B.1-7 |
| - Transformation | 5\% | - BI Blue Book Chap. 2 | - Tests or Quizzes | - CC.2.3.8.A. 2 |
| - Scientific Notation | 5\% | - BI Blue Book Chap. 10 | - Tests or Quizzes | - CC.2.2.8.B. 1 <br> - CC.2.1.HS.F. 1 |
| - Polynomials and factoring | 5\% | - BI Algebra 1 Chap. 7 | - Tests or Quizzes | - CC.2.2.HS.D.3-4 |

Eagle P.A.C.T. Course Connections:
Algebra 1B encourages students to use problem solving skills to analyze and evaluate problems in this course. Students will also need to effectively communicate their thinking and collaborate on problems.

