**PreAlgebra Curriculum Map**

**8th Grade**

**Unit 1 – Real Numbers and Exponents**

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| **1-1** | **Rational Numbers**  CCSS.MATH.CONTENT.8.NS.A.1 |  |  |
| **1-2** | **Operations with Rational Numbers**  CCSS.MATH.CONTENT.8.NS.A.1 |  |  |
| **1-3** | **Converting Fractions and Decimals**  CCSS.MATH.CONTENT.8.NS.A.1 |  |  |
| **1-4** | **Identifying Irrational Numbers**  CCSS.MATH.CONTENT.8.NS.A.2  CCSS.MATH.CONTENT.8.NS.A.1 |  |  |
| **1-5** | **Properties of Irrational Numbers**  CCSS.MATH.CONTENT.8.NS.A.1  CCSS.MATH.CONTENT.8.NS.A.2 |  |  |
| **1-6** | **Comparing and Ordering Irrational Numbers on a Number Line**  CCSS.MATH.CONTENT.8.NS.A.2 |  |  |
| **1-7** | **Evaluation and Approximation of Square and Cube Roots**  CCSS.MATH.CONTENT.8.NS.A.2  CCSS.MATH.CONTENT.8.EE.A.2 |  |  |
| **1-8** | **Negative Exponents**  CCSS.MATH.CONTENT.8.EE.A.1 |  |  |
| **1-9** | **Negative Exponent Operations**  CCSS.MATH.CONTENT.8.EE.A.1 |  |  |
| **1-10** | **Scientific Notation**  CCSS.MATH.CONTENT.8.EE.A.3 |  |  |
| **1-11** | **Operations with Numbers in Scientific Notation**  CCSS.MATH.CONTENT.8.EE.A.4 |  |  |

**Unit 2 – Equations and Expressions**

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| **2-1** | **Expressions with Radicals Exponents**  CCSS.MATH.CONTENT.8.EE.A.2 |  |  |
| **2-2** | **Expressions with Integer Exponents**  CCSS.MATH.CONTENT.8.EE.A.1 |  |  |
| **2-3** | **Creating Linear Equations**  CCSS.MATH.CONTENT.8.EE.B.5  CCSS.MATH.CONTENT.8.EE.B.6 |  |  |
| **2-4** | **Solving Equations with Variables on Both Sides**  CCSS.MATH.CONTENT.8.EE.C.7  CCSS.MATH.CONTENT.8.EE.C.7.B |  |  |
| **2-5** | **Solving Equations with Distributive Property**  CCSS.MATH.CONTENT.8.EE.C.7  CCSS.MATH.CONTENT.8.EE.C.7.B |  |  |
| **2-6** | **Solving Equations by Combining Like Term**  CCSS.MATH.CONTENT.8.EE.C.7  CCSS.MATH.CONTENT.8.EE.C.7.B |  |  |
| **2-7** | **One/Infinite/No solutions of Equation**  CCSS.MATH.CONTENT.8.EE.C.7.A |  |  |
| **2-8** | **Solving Exponent Equations**  CCSS.MATH.CONTENT.8.EE.C.7  CCSS.MATH.CONTENT.8.EE.C.7.B |  |  |

**Unit 3 – Linear and Functional Relationships**

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| **3-1** | **Intro to Functions/Graphing and Writing a Function Rule**  CCSS.MATH.CONTENT.8.F.A.1  CCSS.MATH.CONTENT.8.F.B.4  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-2** | **Graphing Functions**  CCSS.MATH.CONTENT.8.F.A.1  CCSS.MATH.CONTENT.8.F.A.2  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-3** | **Linear or Non Linear Functions**  CCSS.MATH.CONTENT.8.F.A.3  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-4** | **Exploring Linear Functions**  CCSS.MATH.CONTENT.8.F.A.2  CCSS.MATH.CONTENT.8.F.B.4  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-5** | **Equations of Linear Functions**  CCSS.MATH.CONTENT.8.F.A.3  CCSS.MATH.CONTENT.8.F.B.4 |  |  |
| **3-6** | **Graphs of Linear Functions**  CCSS.MATH.CONTENT.8.F.A.1  CCSS.MATH.CONTENT.8.F.A.2  CCSS.MATH.CONTENT.8.F.A.3  CCSS.MATH.CONTENT.8.F.B.4  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-7** | **Tables of Linear Functions**  CCSS.MATH.CONTENT.8.F.B.4  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-8** | **Increasing, Decreasing, Max and Min**  CCSS.MATH.CONTENT.8.F.B.4  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-9** | **Interpret the Rate of Change**  CCSS.MATH.CONTENT.8.F.A.2  CCSS.MATH.CONTENT.8.F.B.4  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-10** | **Contextualizing Function Qualities**  CCSS.MATH.CONTENT.8.F.A.1  CCSS.MATH.CONTENT.8.F.A.2  CCSS.MATH.CONTENT.8.F.B.5 |  |  |
| **3-11** | **Sketching a Piecewise Function**  CCSS.MATH.CONTENT.8.F.A.2  CCSS.MATH.CONTENT.8.F.B.4  CCSS.MATH.CONTENT.8.F.B.5 |  |  |

**Unit 4– Systems of Linear Equations**

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| **4-1** | **Graphing with Slope – Intercept Form**  CCSS.MATH.CONTENT.8.F.A.3  CCSS.MATH.CONTENT.8.EE.C.8.A  CCSS.MATH.CONTENT.8.EE.C.8.C |  |  |
| **4-2** | **Solving Systems by Graphing**  CCSS.MATH.CONTENT.8.EE.C.8.A  CCSS.MATH.CONTENT.8.EE.C.8.C |  |  |
| **4-3** | **Solving Systems Using Substitution**  CCSS.MATH.CONTENT.8.EE.C.8  CCSS.MATH.CONTENT.8.EE.C.8.B  CCSS.MATH.CONTENT.8.EE.C.8.C |  |  |
| **4-4** | **Solving Systems Using Elimination**  CCSS.MATH.CONTENT.8.EE.C.8  CCSS.MATH.CONTENT.8.EE.C.8.B  CCSS.MATH.CONTENT.8.EE.C.8.C |  |  |
| **4-5** | **Solving Systems via Inspection**  CCSS.MATH.CONTENT.8.EE.C.8.A  CCSS.MATH.CONTENT.8.EE.C.8.B  CCSS.MATH.CONTENT.8.EE.C.8.C |  |  |
| **4-6** | **Applications of Systems of Linear Equations**  CCSS.MATH.CONTENT.8.EE.C.8  CCSS.MATH.CONTENT.8.EE.C.8.C |  |  |

**Unit 5 – Patterns and Bivariate Data**

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| **5-1** | **Constructing Scatter Plots**  CCSS.MATH.CONTENT.8.SP.A.1  CCSS.MATH.CONTENT.8.SP.A.2  CCSS.MATH.CONTENT.8.SP.A.3 |  |  |
| **5-2** | **Analyzing Scatter Plots**  CCSS.MATH.CONTENT.8.SP.A.1  CCSS.MATH.CONTENT.8.SP.A.2  CCSS.MATH.CONTENT.8.SP.A.3 |  |  |
| **5-3** | **Linear or Nonlinear Correlation**  CCSS.MATH.CONTENT.8.SP.A.1  CCSS.MATH.CONTENT.8.SP.A.2  CCSS.MATH.CONTENT.8.SP.A.3 |  |  |
| **5-4** | **The Line of Best Fit**  CCSS.MATH.CONTENT.8.SP.A.1  CCSS.MATH.CONTENT.8.SP.A.2  CCSS.MATH.CONTENT.8.SP.A.3 |  |  |
| **5-5** | **Constructing a Two-Way Tables**  CCSS.MATH.CONTENT.8.SP.A.4 |  |  |
| **5-6** | **Interpret a Two-Way Tables**  CCSS.MATH.CONTENT.8.SP.A.4 |  |  |

**Unit 6 – Congruency and Similarity**

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| **6-1** | **Identifying Transformations**  CCSS.MATH.CONTENT.8.G.A.1  CCSS.MATH.CONTENT.8.G.A.1.A  CCSS.MATH.CONTENT.8.G.A.1.B  CCSS.MATH.CONTENT.8.G.A.1.C  CCSS.MATH.CONTENT.8.G.A.2 |  |  |
| **6-2** | **Constructing Rotations/Properties of Rotations**  CCSS.MATH.CONTENT.8.G.A.1  CCSS.MATH.CONTENT.8.G.A.1.A  CCSS.MATH.CONTENT.8.G.A.1.B  CCSS.MATH.CONTENT.8.G.A.1.C  CCSS.MATH.CONTENT.8.G.A.2  CCSS.MATH.CONTENT.8.G.A.3  CCSS.MATH.CONTENT.8.G.A.4 |  |  |
| **6-3** | **Constructing Reflections/Properties of Reflections**  CCSS.MATH.CONTENT.8.G.A.1  CCSS.MATH.CONTENT.8.G.A.1.A  CCSS.MATH.CONTENT.8.G.A.1.B  CCSS.MATH.CONTENT.8.G.A.1.C  CCSS.MATH.CONTENT.8.G.A.2  CCSS.MATH.CONTENT.8.G.A.3  CCSS.MATH.CONTENT.8.G.A.4 |  |  |
| **6-4** | **Constructing Translations/Properties of Translations**  CCSS.MATH.CONTENT.8.G.A.1  CCSS.MATH.CONTENT.8.G.A.1.A  CCSS.MATH.CONTENT.8.G.A.1.B  CCSS.MATH.CONTENT.8.G.A.1.C  CCSS.MATH.CONTENT.8.G.A.2  CCSS.MATH.CONTENT.8.G.A.3  CCSS.MATH.CONTENT.8.G.A.4 |  |  |
| **6-5** | **Constructing Dilatations/Properties of Dilatations**  CCSS.MATH.CONTENT.8.G.A.3  CCSS.MATH.CONTENT.8.G.A.4 |  |  |
| **6-6** | **Identifying a Series and Determining Congruence or Similarity**  CCSS.MATH.CONTENT.8.G.A.2  CCSS.MATH.CONTENT.8.G.A.4 |  |  |
| **6-7** | **The Sum of Angles in a Triangle**  CCSS.MATH.CONTENT.8.G.A.4  CCSS.MATH.CONTENT.8.G.A.5 |  |  |
| **6-8** | **Similar Triangles**  CCSS.MATH.CONTENT.8.G.A.5 |  |  |
| **6-9** | **Parallel Lines Cut by a Transversal**  CCSS.MATH.CONTENT.8.G.A.5 |  |  |

**Unit 7 - Geometry**

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| **7-1** | **Pythagorean Theorem and its Converse**  CCSS.MATH.CONTENT.8.G.B.6 |  |  |
| **7-2** | **2D Applications of Pythagorean Theorem**  CCSS.MATH.CONTENT.8.G.B.7 |  |  |
| **7-3** | **3D Applications of Pythagorean Theorem**  CCSS.MATH.CONTENT.8.G.B.7 |  |  |
| **7-4** | **Pythagorean Theorem and Distance Between Points in a Coordinate System**  CCSS.MATH.CONTENT.8.G.B.8 |  |  |
| **7-5** | **Volume of Cylinders, Cones, and Spheres**  CCSS.MATH.CONTENT.8.G.C.9 |  |  |
| **7-6** | **Solving for a Missing Dimension**  CCSS.MATH.CONTENT.8.G.C.9 |  |  |
| **7-7** | **Volume of Composite Shapes**  CCSS.MATH.CONTENT.8.G.C.9 |  |  |