

## Marietta City Schools Pacing Guide

**Subject: Math**

**Grade Level: 8th Grade**

**Time Frame: Year Long**

| Month / Week  | CCS Benchmarks   | Skills/Activities   | Resources  | Assessment  |
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| <b>Aug-Sept</b><br><br><b>Unit 1</b><br>Real Numbers, Exponents, And Scientific Notation            | <b>8.NS The Number System</b><br>8.NS.1<br>8.NS.2<br><b>8.EE Expressions and Equations</b><br>8.EE.1<br>8.EE.2<br>8.EE.3<br>8.EE.4   | <b>Module 1 - Real Numbers</b><br>- Rational and Irrational Numbers<br>- Converting decimals to fractions<br>- Square and Cube Roots<br><b>Module 2 - Exponents and Scientific Notation</b><br>- Integer Exponents<br>- Scientific notation using positive and negative powers of 10<br>- Operations with Scientific Notation   | -Textbook/Student Workbook<br>- Go Math computer software<br>- PowerPoint presentations<br>- Additional websites<br>- Visual Representations (Ex. boxes, numberline)<br>- Real numbers graphic organizers<br>- Exponent foldable<br>- Calculator reference sheet<br>- Calculator | Teacher created summative assessments<br><br>Go Math online/book assessments<br><br>Formative Assessments |
| <b>Oct-Dec</b><br><br><b>Unit 2</b><br>Proportional and Nonproportional Relationships and Functions | <b>8.EE Expressions and Equations</b><br>8.EE.5<br>8.EE.6<br><b>8.F Functions</b><br>8.F.1<br>8.F.2<br>8.F.3<br>8.F.4<br>8.F.5<br><b>8.SP Statistics and Probability</b><br>8.SP.1<br>8.SP.2<br>8.SP.3 | <b>Module 3 - Proportional Relationships</b><br>- Graphing proportional relationships (Slope and Rate of Change)<br>- Unit Rates<br><b>Module 4 - Nonproportional Relationships</b><br>- Interpret the equation $y=mx+b$<br>- Determine and compare slope and y-intercept from a table or graph.<br><b>Module 5 - Writing Linear Equations</b><br>- Writing linear equations from tables, graphs, and word problems.<br>- Comparing linear equations<br><b>Module 6 - Functions</b><br>- Identifying functions (Input and Output)<br>- Comparing functions<br>- Describing functional relationships | -Textbook/Student Workbook<br>- Go Math computer software<br>- PowerPoint presentations<br>- Additional websites (Ex. Kahoot)<br>- Slope Foldable<br>- Music videos<br>- Coordinate Plane resources<br>- Calculator  | Teacher created summative assessments<br><br>Go Math online/book assessments<br><br>Formative Assessments |

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| <p><b>Jan</b></p> <p><b>Unit 3</b><br/>Solving Equations and Systems of Equations</p> | <p><b>8.EE Expressions and Equations</b><br/>8.EE.7<br/>8.EE.7a<br/>8.EE.7b<br/>8.EE.8<br/>8.EE.8a<br/>8.EE.8b<br/>8.EE.8c</p>                              | <p><b>Module 7 - Solving Linear Equations</b><br/>- Solving equations with one variable<br/>- Distributive property<br/>- Equations with many or no solutions</p> <p><b>Module 8 - Solving Systems of Linear Equations</b><br/>- Using real-world situations to solve systems by graphing, substitution and elimination.</p>  | <ul style="list-style-type: none"> <li>-Textbook/Student Workbook</li> <li>- Go Math computer software</li> <li>- PowerPoint presentations</li> <li>- Additional websites</li> <li>- Foldables</li> <li>- Supplemental review worksheets</li> <li>- Calculator</li> </ul>   | <p>Teacher created summative assessments</p> <p>Go Math online/book assessments</p> <p>Formative Assessments</p> |
| <p><b>Feb - March</b></p> <p><b>Unit 4</b><br/>Transformational Geometry</p>          | <p><b>8.G Geometry</b><br/>8.G.1<br/>8.G.2<br/>8.G.3</p>  | <p><b>Module 9 - Transformations and Congruence</b><br/>- Understand and describe translations, reflections, and rotations both on a graph and algebraically.<br/>- Understand congruent figures within transformations</p> <p><b>Module 10 - Transformations and Similarity</b><br/>- Understand and describe dilations both on a graph and algebraically.<br/>- Understand and describe similar figures</p> | <ul style="list-style-type: none"> <li>-Textbook/Student Workbook</li> <li>- Go Math computer software</li> <li>- PowerPoint presentations</li> <li>- Additional websites (interactive) (Ex. barbie, car)</li> <li>- Videos (Ex. Honey I Shrunk the Kids)</li> <li>- Graph Paper/Coordinate Plane</li> <li>- Calculator</li> </ul>  | <p>Teacher created summative assessments</p> <p>Go Math online/book assessments</p> <p>Formative Assessments</p> |
| <p><b>March -April</b></p> <p><b>Unit 5</b><br/>Measurement Geometry</p>              | <p><b>8.EE Expressions and Equations</b><br/>8.EE.6<br/>8.EE.7<br/>8.EE.7b</p> <p><b>8.G Geometry</b><br/>8.G.5<br/>8.G.6<br/>8.G.7<br/>8.G.8<br/>8.G.9</p> | <p><b>Module 11 - Angle Relationships in Parallel Lines and Triangles</b><br/>- Use parallel lines cut by a transversal to compare angles.<br/>- Use angle theorems and angle to angle similarity</p> <p><b>Module 12 - Pythagorean Theorem</b><br/>- Explain and apply a proof for the pythagorean theorem</p> <p><b>Module 13 - Volume</b><br/>- Solve for the volume of cylinders, cones, and spheres.</p> | <ul style="list-style-type: none"> <li>-Textbook/Student Workbook</li> <li>- Go Math computer software</li> <li>- PowerPoint presentations</li> <li>- Additional websites</li> <li>- 3D Shapes</li> <li>- Supplemental worksheets for nets</li> <li>- Formula reference sheet</li> <li>- Coloring Sheet with Transversal</li> <li>- Angle Vocabulary Sheet</li> <li>- Calculator</li> </ul> | <p>Teacher created summative assessments</p> <p>Go Math online/book assessments</p> <p>Formative Assessments</p> |
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| <p><b>May - June</b></p> <p><b><u>Unit 6</u></b><br/>Statistics</p> | <p><b>8.SP Statistics and Probability</b></p> <p>8.SP.1<br/>8.SP.2<br/>8.SP.3<br/>8.SP.4</p> | <p><b><u>Module 14 - Scatter Plots</u></b></p> <ul style="list-style-type: none"> <li>- Construct and interpret scatter plots with bivariate data</li> <li>- Line associations and trendlines</li> </ul> <p><b><u>Module 15 - Two-way Tables</u></b></p> <ul style="list-style-type: none"> <li>- Construct and interpret a two-way table summarizing data on two variables.</li> </ul> | <ul style="list-style-type: none"> <li>-Textbook/Student Workbook</li> <li>- Go Math computer software</li> <li>- PowerPoint presentations</li> <li>- Additional websites</li> <li>- Calculator</li> </ul> | <p>Teacher created summative assessments</p> <p>Go Math online/book assessments</p> <p>Formative Assessments</p> |
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