





# Cornwall-Lebanon School District Curriculum Overview

## 8<sup>th</sup> Grade Math Academic

length of time in weeks	Concepts & Competencies	Common Assessments	Academic Standards (PA Core if applicable)
<b>Unit 1</b>  3	<p style="text-align: center;"><b><u>Integer/Rational Numbers</u></b></p> Adding, subtracting, multiplying and dividing integers Square/Cube Roots Order of Operations Real World Application	<ul style="list-style-type: none"> <li>➤ Rational Numbers Unit Test</li> <li>➤ MP1 Exam</li> </ul>	CC.2.1.7.E.1, M07.A-N.1.1.1, M07.A-N.1.1.3, CC.2.2.8.B.1, M08.B-E.1.1.2, CC.2.1.8.E.1, M08.A-N.1.1.1, M08.A-N.1.1.2
<b>Unit 2</b>  3	<p style="text-align: center;"><b><u>Exponential Properties</u></b></p> Multiplication Properties Division Properties Power to a Power Properties Negative and Zero Properties Scientific Notation <ul style="list-style-type: none"> <li>- Convert Scientific Notation to Standard Form</li> <li>- Convert Standard Form to Scientific Notation</li> <li>- Multiply and Divide Scientific Notation</li> </ul> Real World Applications	<ul style="list-style-type: none"> <li>➤ Exponential Properties Unit Test</li> <li>➤ MP1 Exam</li> </ul>	CC.2.2.8.B.1, M08.B-E.1.1.1, M08.B-E.1.1.3, M08.B-E.1.1.4
<b>Unit 3</b>  2	<p style="text-align: center;"><b><u>Irrational Numbers</u></b></p> Estimating square roots and cube roots Number Line Operations with roots Square/Cube Root equations	<ul style="list-style-type: none"> <li>➤ Irrational Numbers Unit Test</li> <li>➤ MP2 Exam</li> </ul>	CC.2.1.8.E.4, M08.A-N.1.1.3, M08.A-N.1.1.4, M08.A-N.1.1.5
<b>Unit 4</b>  3	<p style="text-align: center;"><b><u>Basic Algebra</u></b></p> Solving one step equations Solving two step equations Solving multi-step equations One Solution, No Solutions, Infinite Solutions Real World Applications	<ul style="list-style-type: none"> <li>➤ Basic Algebra Unit Test</li> <li>➤ MP2 Exam</li> </ul>	CC.2.2.7.B.3, M07.B-E.2.2.1, CC.2.2.8.B.3, M08.B-E.3.1.1, , M08.B-E.3.1.2,

<b>Unit 5</b> <div style="border: 1px solid red; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">2</div>	<p style="text-align: center;"><u><b>Pythagorean Theorem</b></u></p> Parts of a Right Triangle Prove Right Triangle Solve missing side Distance Complex figures using Right Triangle 3D Shapes Real World Applications	<ul style="list-style-type: none"> <li>➤ Pythagorean Theorem Unit Test</li> <li>➤ MP2 Exam</li> </ul>	CC.2.3.8.A.3, M08.C-G.2.1.1, M08.C-G.2.1.2, M08.C-G.2.1.3
<b>Unit 6</b> <div style="border: 1px solid red; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">5</div>	<p style="text-align: center;"><u><b>Functions</b></u></p> Function or Not a Function X-Y Function Tables Functions to a Graph Rate of Change Slope Writing the Function Rule Graphing Lines Comparing Slope/Rate of Change Real World Applications	<ul style="list-style-type: none"> <li>➤ Functions Unit Test</li> <li>➤ MP3 Exam</li> </ul>	CC.2.2.8.B.2, M08.B-E.2.1.1, M08.B-E.2.1.2, M08.B-E.2.1.3, , M08.B-F.1.1.1, M08.B-F.1.1.2, M08 CC.2.2.8.C.1.B-F.1.1.3, CC.2.2.8.C.2, M08.B-F.2.1.1, M08.B-F.2.1.2
<b>Unit 7</b> <div style="border: 1px solid red; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">3</div>	<p style="text-align: center;"><u><b>Systems</b></u></p> Slope Intercept Form Slope and y-intercept Graphing Lines from equation Write equation using graph Rewriting equations into Slope Intercept form Solving systems by graphing Solve systems by substitution Real World Applications	<ul style="list-style-type: none"> <li>➤ Systems Unit Test</li> <li>➤ MP3 Exam</li> </ul>	CC.2.2.HS.D.7, CC.2.2.HS.D.10, CC.2.2.8.B.2, M08.B-E.2.1.3, CC.2.2.8.B.3, M08.B-E.3.1.3, M08.B-E.3.1.4, M08.B-E.3.1.5
<b>Unit 8</b> <div style="border: 1px solid red; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">2</div>	<p style="text-align: center;"><u><b>Statistics</b></u></p> Linear vs NonLinear Scatter Plots Linear Regression Two Way Tables Relative Frequency	<ul style="list-style-type: none"> <li>➤ Statistics Unit Test</li> <li>➤ MP3 Exam</li> </ul>	CC.2.4.8.B.1, M08.D-S.1.1.1, M08.D-S.1.1.2, M08.D-S.1.1.3, CC.2.4.8.B.2, M08.D-S.1.2.1
<b>Unit 9</b> <div style="border: 1px solid red; border-radius: 50%; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center; margin: 5px auto;">2</div>	<p style="text-align: center;"><u><b>Volume</b></u></p> Find Volume of Cube, Rectangular Prism, Cone, Cylinders, and Sphere	<ul style="list-style-type: none"> <li>➤ Volume Unit Test</li> <li>➤ MP3 Exam</li> </ul>	CC.2.3.8.A.1, M08.C-G.3.1.1

		Volume of Compound Shapes Real World Application		
Unit 10	2	<p style="text-align: center;"><u>Transformations</u></p> Reflections - Slope of the reflection line Translations Rotations Dilations	<ul style="list-style-type: none"> <li>➤ Transformations Unit Test</li> <li>➤ MP4 Exam</li> </ul>	CC.2.3.8.A.2, M08.C-G.1.1.1, M08.C-G.1.1.2, M08.C-G.1.1.3, M08.C-G.1.1.4
Unit 11	2	<p style="text-align: center;"><u>Inequalities</u></p> Graph inequalities Graph compound inequalities Solve linear inequalities Graph linear inequalities	<ul style="list-style-type: none"> <li>➤ Inequalities Unit Test</li> <li>➤ MP4 Exam</li> </ul>	CC.2.2.7.B.3, M07.B-E.2.2.1, CC.2.2.8.B.3, M08.B-E.3.1.1, , M08.B-E.3.1.2