

Cornwall-Lebanon School District Curriculum Overview

8th Grade Math Academic

 length of time in weeks	Concepts & Competencies	Common Assessments	Academic Standards (PA Core if applicable)
Unit 1 	<u>Integer/Rational Numbers</u> Adding, subtracting, multiplying and dividing integers Square/Cube Roots Order of Operations Real World Application	➤ Rational Numbers Unit Test ➤ MP1 Exam	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
Unit 2 	<u>Exponential Properties</u> Multiplication Properties Division Properties Power to a Power Properties Negative and Zero Properties Scientific Notation - Convert Scientific Notation to Standard Form - Convert Standard Form to Scientific Notation - Multiply and Divide Scientific Notation Real World Applications	➤ Exponential Properties Unit Test ➤ MP1 Exam	CC.2.2.8.B.1, M08.B-E.1.1.1, M08.B-E.1.1.3, M08.B-E.1.1.4
Unit 3 	<u>Irrational Numbers</u> Estimating square roots and cube roots Number Line Operations with roots Square/Cube Root equations	➤ Irrational Numbers Unit Test ➤ MP2 Exam	CC.2.1.8.E.4, M08.A-N.1.1.3, M08.A-N.1.1.4, M08.A-N.1.1.5
Unit 4 	<u>Basic Algebra</u> Solving one step equations Solving two step equations Solving multi-step equations One Solution, No Solutions, Infinite Solutions Real World Applications	➤ Basic Algebra Unit Test ➤ MP2 Exam	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,
Unit 5 	<u>Pythagorean Theorem</u> Parts of a Right Triangle Prove Right Triangle Solve missing side	➤ Pythagorean Theorem Unit Test ➤ MP2 Exam	CC.2.3.8.A.3, M08.C-G.2.1.1, M08.C-G.2.1.2, M08.C-G.2.1.3

		Distance Complex figures using Right Triangle 3D Shapes Real World Applications		
Unit 6	5	<u>Functions</u> 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	➤ Functions Unit Test ➤ MP3 Exam	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
Unit 7	3	<u>Systems</u> 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	➤ Systems Unit Test ➤ MP3 Exam	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
Unit 8	2	<u>Statistics</u> Linear vs NonLinear Scatter Plots Linear Regression Two Way Tables Relative Frequency	➤ Statistics Unit Test ➤ MP3 Exam	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
Unit 9	2	<u>Volume</u> Find Volume of Cube, Rectangular Prism, Cone, Cylinders, and Sphere Volume of Compound Shapes Real World Application	➤ Volume Unit Test ➤ MP3 Exam	CC.2.3.8.A.1, M08.C-G.3.1.1
Unit 10	2	<u>Transformations</u> Reflections - Slope of the reflection line Translations Rotations Dilations	➤ Transformations Unit Test ➤ MP4 Exam	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	<u>Inequalities</u> Graph inequalities Graph compound inequalities Solve linear inequalities Graph linear inequalities	➤ Inequalities Unit Test ➤ MP4 Exam	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