



Mount Horeb Area School District Essential Learning Outcomes

Grade: 7/8	Course: Math 3	
Course Overview: This unit addresses the following topics: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) understanding the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.		
Essential Learning Outcomes for Subject or Course	Standards	Rubrics and Study Guides
The Number System		
Students will be able to know that there are numbers that are not rational, and approximate them by rational numbers	8.NS.1 8.NS.2	Unit 1A & 1B Rubric Unit 1A and 1B Study Guide
Expressions and Equations		
Students will be able to work with the properties of integer exponents.	8.EE.1 8.EE.2	Properties of Exponents Rubric Unit 2 Study Guide 1B Study Guide
Students will be able to apply properties of exponents to numbers in scientific notation.	8.EE.3 8.EE.4	Scientific Notation Rubric Unit 4 Study Guide
Students will be able to understand the connections between proportional relationships, lines, and linear equations.	8.EE.5 8.EE.6	Rubric Unit 5 Study Guide
Students will be able to solve and interpret linear equations.	8.EE.7 8.EE.8	Rubric Unit 3 Study Guide
Functions		
Students will be able to define, evaluate, and compare functions.	8.F.A	Rubric (Unit 7) Functions Study Guide



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Students will be able to use functions to model relationships between quantities.	8.F.B (continued work)	
Geometry		
Students will be able to understand rigid transformations and congruence using physical models, transparencies, or geometry software.	8.G.1 8.G.2	Rubric Unit Study Guide
Students will be able to establish facts about angle relationships.	8.G.5	
Students will be able to understand dilations and similarity using physical models, transparencies, or geometry software.	8.G.3 8.G.4	Rubric
Students will be able to understand and apply the Pythagorean Theorem.	8.G.6 8.G.7 8.G.8	Rubric Unit Study Guide
Students will be able to solve real-world and mathematical problems involving volume of cylinders, cones and spheres.	8.G.9	Rubric Unit Study Guide
Statistics and Probability		
Students will be able to investigate patterns of association of bivariate data.	8.SP.1 8.SP.2 8.SP.3 8.SP.4	