## Worth County Middle School 7th Grade Gifted Mathematics Curriculum Map

### 1st Semester

| 1st Nine weeks | | | | 2nd Nine Weeks | | |
|---|---|---|---|---|---|---|
| **Unit 1:** Operations With Rational #'s | **Unit 2:** Expressions and Equations | **Unit 3:** Ratios & Proportional Relationships | **Unit 4:** Inferences | **Unit 5:** Geometry | **Unit 6:** Probability | **Unit 7:** 8th Grade Acceleration Exponents |
| **Standards:** MGSE7.NS.1a MGSE7.NS.1b MGSE7.NS.1c MGSE7.NS.1d MGSE7.NS.2a MGSE7.NS.2b MGSE7.NS.2c MGSE7.NS.2d MGSE7.NS.3 | **Standards:** MGSE7.EE.1 MGSE7.EE.2 MGSE7.EE.3 MGSE7.EE.4a MGSE7.EE.4b | **Standards:** MGSE7.RP.1 MGSE7.RP.2a MGSE7.RP.2b MGSE7.RP.2c MGSE7.RP.2d MGSE7.RP.3 MGSE7.G.1 | **Standards:** MGSE7.SP.1 MGSE7.SP.2 MGSE7.SP.3 MGSE7.SP.4 | **Standards:** MGSE7.G.2 MGSE7.G.3 MGSE7.G.4 MGSE7.G.5 MGSE7.G.6 MGSE8.G.6 MGSE8.G.7 MGSE8.G.8 MGSE8.G.9 MGSE8.EE.2 MGSE8.EE.7 | **Standards:** MGSE7.SP.5 MGSE7.SP.6 MGSE7.SP.7a MGSE7.SP.7b MGSE7.SP.8a MGSE7.SP.8b MGSE7.SP.8c | **Standards:** MGSE8.EE.1 MGSE8.EE.2 MGSE8.EE.3 MGSE8.EE.4 MGSE8.EE.7a MGSE8.EE.7b MGSE8.NS.1 MGSE8.NS.2 |
| <u>Concepts</u> *Integer Rules -Compare & Order -Add, Subtract, Multiply & Divide *Rational #'s -Compare & Order -Add, Subtract, Multiply & Divide *Operations # lines -Vertical and Horizontal *Using Models to display operations *Zero Pairs/Additive Inverse *Absolute Value *Properties of Numbers *Converting Fractions to Decimals with long Division | <u>Concepts</u> *Variable & Coefficients *Write/Interpret Algebraic Expressions *Solving Equations w/rational numbers -One-Step -Two-Step -Multistep *Converting word problems into equations & expressions *Inequalities -One-Step -Two-Step | <u>Concepts</u> *Unit Rates -Ratios -Lengths -Areas *Representing Proportional Relationships *Testing Equivalent Ratios -In a table -On a graph *Constant of Proportionality (Tables, Graphs, Equations, Diagrams, Verbal Descriptions) *Multistep Ratio and % problems. *Scale Drawings | <u>Concepts</u> *Statistics -Populations -Samples -Validity *Drawing Inferences w/ multiple samples *Comparative Inferences *Measures of *Center (Mean, Median, Mode) *Measures of Variability | <u>Concepts</u> *Constructing Triangles with given conditions *Cross-sections of 3D Figures *Circumference& Area of Circles *Angles -Supplementary -Complementary -Vertical -Adjacent *Write and Solve equations for unknown angles *Area, Volume, & Surface Area of 2D & 3D objects *Right Triangles *Pythagorean Theorem *Distance between two points on a coordinate plane using the Pythagorean Theorem *Volume of cylinders, cones, and spheres *Use Radicals and Integer Exponents | <u>Concepts</u> *Simple Events -Probability -Likelihood -Approximating & Predicting *Probability Models -Uniform -Non-Uniform -Explaining Discrepancy *Compound Events -Lists -Tables -Tree Diagrams -Simulations -Sample Space | Concepts * Properties of integer exponents *Square Roots *Cube Roots *Scientific Notation *Irrational Numbers *Estimate Irrational Numbers |

### Standards for Mathematical Practice

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|---|---|
| 1 Make sense of problems and persevere in solving them. | 5 Use appropriate tools strategically. |
| 2 Reason abstractly and quantitatively. | 6 Attend to precision. |
| 3 Construct viable arguments and critique the reasoning of others. | 7 Look for and make use of structure. |
| 4 Model with mathematics | 8 Look for and express regularity in repeated reasoning. |

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