Year-at-a-Glance (YAG) --- Grade 5 --- Mathematics

First Semester	Second Semester
Unit 1: Number and Operations I *(5 weeks)* **Approximate dates: August 26 – September 27, 2014** **1.1** I can multiply multi-digit whole numbers using multiple efficient strategies. (5.1.1.4) **1.2** I can solve real-world and mathematical problems in different ways, and assess the reasonableness of my answers. (5.1.1.4) **1.3** I can estimate the solution of a problem to determine if my answer is reasonable. (5.1.1.3) **1.4** I can divide multi-digit whole numbers using multiple efficient strategies and represent the quotient in a variety of ways. (5.1.1.1) **1.5** I can analyze the situation of a story problem and define the quotient based on the situation. (5.1.1.2) **Unit 2: Rational Numbers I** *(4 weeks)* **Approximate dates: September 30 – November 8, 2014** **2.1** I can create and use equivalent fractions, mixed numbers, and improper fractions in various contexts (MN Benchmark 5.1.2.4) **2.2** I can compare and order fractions (MN Benchmark 5.1.2.3) **2.3** I can locate fractions on the number line (MN Benchmark 5.1.2.3) **2.4** I can represent real-world (including measurement, geometry, and data) and mathematical problems involving addition and subtraction of fractions using multiple strategies including estimation. (MN Benchmark 5.1.3.1, 5.1.3.2, 5.1.3.3, 5.1.3.4) **2.5** I can represent real-world (including measurement, geometry, and data) and mathematical problems involving addition and subtraction of fractions using multiple strategies including standard algorithm. (MN Benchmark 5.1.3.1, 5.1.3.2, 5.1.3.3, 5.1.3.4) **Unit 3: Geometry and Measurement** *(6 weeks)* **Approximate dates: November 11, 2014 – January 10, 2015** **3.1** I can measure the surface area of rectangular prisms using appropriate units. (5.3.2.2) **3.2** I can measure the volume of rectangular prisms using appropriate units. (5.3.2.3) **3.3** I can create and use formulas to determine the volume of rectangular prisms and justify why they work. (5.3.2.4) **3.4** I can describe and classify a pyramid based on its attributes (triangular, rectangular, square, pentagonal, hexagonal, octagonal) and draw its net. (5.3.1.1) **3.5** I can describe and classify prisms (cube, rectangular, triangular, pentagonal, hexagonal, octagonal, cylinder) based on their attributes and draw their nets. (5.3.1.2) **3.6** I can create and use a formula to determine the area of a parallelogram. (5.3.2.1) **3.7** I can create and use a formula to determine the area of a triangle. (5.3.2.1) **3.8** I can decompose other polygons into triangles to determine their area. (5.3.2.1)	**Unit 4: Algebra** *(6 weeks)* **Approximate dates: January 13 – February 21, 2015** **4.1** I can represent and create real-world situations with equations and inequalities. (5.2.3.2) **4.2** I can determine if a given value for a variable makes an equation or inequality true. (5.2.3.1) **4.3** I can apply the commutative, associative and distributive properties to solve problems involving whole numbers. (5.2.2.1) **4.4** I can use the order of operations to solve problems involving whole numbers. (5.2.2.1) **4.5** I can describe patterns of change and solve problems by creating and and using rules, tables, spreadsheets and graphs. (5.2.1.1) **4.6** I can use a rule or table to represent ordered pairs of positive numbers. (5.2.1.2) **4.7** I can graph ordered pairs on a coordinate system. (5.2.1.2) **4.8** I can create a graph using positive numbers from a rule or table. (5.2.1.2) **4.9** I can evaluate expressions and solve equations with multiple variables when the values of all the variables, except one, are given. (5.2.3.3) **Unit 5: Data** *(3 weeks)* **Approximate dates: February 24 – March 14, 2015** **5.1** I can organize, create, and analyze double bar graphs, line graphs, spreadsheets, and tables with whole numbers, fractions, and decimals. (5.4.1.2) **5.2** I can apply the concepts of mean, median, and range to interpret a set of data. (5.4.1.1) **Unit 6: Rational Numbers II** *(6 weeks)* **Approximate dates: March 17 – May 2, 2015** **6.1** I can create and use decimals, fractions, mixed numbers, and improper fractions in various contexts. (5.1.2.4) **6.2** I can locate fractions and decimal numbers on a number line. (5.1.2.3) **6.3** I can compare and order fraction and decimal numbers. (5.1.2.3) **6.4** I can read and write numbers from millionths to millions. (5.1.2.1) **6.5** I can explain what happens to the value of a number when digits change by one in the tenths, hundredths, or thousandths place. (5.1.2.2) **6.6** I can round numbers to the nearest tenth, hundredth, and thousandth. (0.1, 0.01, 0.001). (5.1.2.5) **6.7** I can solve real-world and mathematical problems involving addition and subtraction of decimals in multiple ways. (5.1.3.1, 5.1.3.2,5.1.3.3, 5.1.3.4) **6.8** I can solve real world problems involving both fractions and decimals. (5.1.3.3, 5.1.3.4) **MCA Testing** *(1 week)* **Units 1-6 must be taught prior to MCA testing.** **Unit 7: Rational Numbers III** *(3 weeks)* **Approximate dates: May 12 – June 2, 2015** **7.1** I can use ratios to describe part-whole and part-part relationships (MN Benchmark 6.1.2.1) **7.2** I can write ratios in different ways (MN Benchmark 6.1.2.1) **7.3** I can compare ratios (MN Benchmark 6.1.2.1) **7.4** I can use ratios to describe real-life situations (MN Benchmark 6.1.2.2)