**2017-18 Mathematics | Grade 8 | MNPS Year-at-a-Glance**

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|  | **Unit** | **Unit Title** | **Standards** | **Summary of Standard** |
| **Quarter 1** | Unit 1 | Rational vs.Irrational Numbers | 8.NS.A.1 8.NS.A.2 **8.EE.A.2** | Rational Numbers as DecimalsApproximating Irrational NumbersPerfect Squares/Cubes and Roots |
| Unit 2 | Intro to Functions | **8.F.A.1 8.F.B.5** | Functions as Input and OutputQualitative Descriptions of Graphs |
| Unit 3 | RepresentingLinear Functionsand Proportional Relationships | **8.EE.B.5 8.EE.B.6 8.F.A.2 8.F.A.3 8.F.B.4** | Compare Reps of ProportionalSlope as Similar Triangles; y=mx+bCompare Reps of FunctionsInterpret y=mx+b; Linear vs. NonInterpret and Write Linear Functions |
| **Quarter 2** | Unit 4 | Solving LinearEquations | **8.EE.C.7a8.EE.C.7b** | Number of Solutions (1/0/INF)Solve Multi-Step Equations |
| Unit 5 | Systems ofLinear Equations | **8.EE.C.8a****8.EE.C.8b****8.EE.C.8c** | Interpreting Solutions of SystemsSolve Algebraically and GraphicallyWriting Systems from Scenarios |
| **Quarter 3** | Unit 6 | Radicals andInteger Exponents | **8.EE.A.2 8.EE.A.1 8.EE.A.3 8.EE.A.4** | Perfect Squares/Cubes and RootsRewriting Terms with ExponentsScientific Notation (No Calculator)Scientific Notation (All Operations) |
| Unit 7 | Investigating Transformations | **8.G.A.1abc 8.G.A.28.G.A.3** | Transformations (Properties)Transformations (Coordinates)Triangle Properties; Transversals |
| Unit 8 | PythagoreanTheorem | **8.G.B.4 8.G.B.5 8.G.B.6** | Proving Pythagorean TheoremFind Missing Side LengthsDistance of a Line on a Graph |
| **Quarter 4** | Unit 9 | 3D Volume | 8.G.C.7 | Volume of Cones, Cylinders, Spheres |
| Unit 10 | Investigatingand InterpretingData and Chance | 8.SP.A.1 8.SP.A.2 8.SP.A.3 8.SP.B.4 | Make and Interpret Scatter PlotsFit an Appropriate Linear LOBFInterpret the LOBF in ContextFind Compound Probabilities |