**2017-18 Mathematics | Integrated Math I | MNPS Year-at-a-Glance**

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|  | **Unit Title** | **Standards** | **Summary of Standard** |
| **Quarter 1** | **Unit 0** Foundations of Algebra (Function-Based) | **M1.A.CED.A.1**  **M1.A.REI.A.1**  **M1.A.CED.A.4**  **M1.A.CED.A.3** M2.A.REI.A.1 | Write Equations and Inequalities  Solving Equations and Inequalities  Rearrange Equations and Formulas A Graph is a Set of All Solutions Explaining Each Step |
| **Unit 1** Applications and Interpretations of Functions | **M1.F.IF.A.1** **M1.F.IF.A.2**  **M1.A.REI.C.3**  **M1.F.IF.B.3**  M1.F.IF.C.6  M1.N.Q.A.1 M1.N.Q.A.2 M1.N.Q.A.3 **M1.F.IF.B.4** **M1.F.IF.B.5** M1.F.IF.C.7 | Function Notation  Evaluate Functions in Context  A Graph is a Set of All Solutions  10 Features of a Graph  Graph Functions (With Calculator)  Choose Appropriate Units  Justify Appropriate Quantities  Choose Accurate Limitations Interpreting the Domain Average Rate of Change Representation of Functions |
| **Quarter 2** | **Unit 2** Parameters of Working with Linear Functions and Inequalities | M1.N.Q.A.1 M1.N.Q.A.2 M1.N.Q.A.3 **M1.A.CED.A.2** **M1.A.CED.A.3**  **M1.A.SSE.A.1a** M1.F.IF.C.6a M1.F.IF.C.7 M1.F.LE.A.2 M1.F.LE.B.4  **M1.A.REI.C.3** M1.S.ID.B.4b **M1.S.ID.C.5** | Choose Appropriate Units  Justify Appropriate Quantities  Choose Accurate Limitations  Systems with 2 Variables  Constraints; Viable Options  Interpret Parts of an Expression  Graph with Intercepts, Max/Min  Representations of Functions  Write Functions and Sequences  Interpret Contextual Parameters  A Graph is a Set of All Solutions  Write LOBF Equation from Scatter  Interpret LOBF in Context |
| **Unit 3** Creating and Using Exponential Models to Solve Problems | M1.N.Q.A.1  M1.N.Q.A.2 M1.N.Q.A.3 **M1.A.CED.A.1** **M1.A.SSE.A.1a M1.A.SSE.A.1b** **M1.A.SSE.B.2a** **M1.A.REI.C.4** **M1.F.IF.A.2** **M1.F.IF.B.3** M1.F.IF.C.7 | Choose Appropriate Units  Justify Appropriate Quantities  Choose Accurate Limitations  Write Equations and Inequalities  Interpret Parts of an Expression (Lin)  Interpret Parts of an Expression (Exp)  Rewrite Exponential Expressions  Interpret Solutions to Systems  Evaluate Functions in Context  10 Features of a Graph  Representations of Functions |
| **Quarter 2** | **Unit 4** Comparing Linear and Exponential Models to Solve Problems | **M1.F.BF.A.1a** **M1.F.BF.A.2** M1.F.LE.A.1 M1.F.LE.A.2 M1.F.LE.A.3 M1.F.LE.B.4 M1.S-ID.B.4a | Explicit Expressions and Recursion Arithmetic and Geometric Sequences Linear vs. Exponential Functions Write Functions and Sequences  Exponential Will Exceed Linear Interpret Contextual Parameters  Use LOBFs for Regression |
| **Quarter 3** | **Unit 5** Transformations as Functions on the Coordinate Plane | M1.G.CO.A.1 M1.G.CO.A.2 M1.G.CO.A.3 M1.G.CO.A.4 M1.G.CO.A.5 **M1.G.CO.B.6 M1.F.IF.A.1** **M1.F.IF.A.2** | Geometry Vocabulary/Definitions  Functions for Image Coordinates  Describe Pre-Image to Image  Define Transformations  Given Pre-Image, Draw Image  Predict Effects of Rigid Motion  Function Notation  Evaluate Functions in Context |
| **Unit 6** Rigid Motion and Triangle Congruence | M1.G.CO.A.1 **M1.G.CO.B.7 M1.G.CO.B.8 M1.G.CO.C.10** M2.A.REI.A.1 | Geometry Vocabulary/Definitions  Triangles: CPCTC  Triangles: SSS/SAS/ASA/AAS  Triangle Theorems  Explaining Each Step |
| **Unit 7** Geometric Proof and Quadrilaterals | **M1.G.CO.C.9 M1.G.CO.C.11** M2.A.REI.A.1 | Line and Angle Theorems  Parallelogram Theorems  Explaining Each Step |
| **Quarter 4** | **Unit 8** Using Systems of Linear Equations and Inequalities to Solve Problems | **M1.A.REI.B.2** **M1.A.REI.C.3** **M1.A.REI.C.4** **M1.A.REI.C.5 M1.A.CED.A.3** M1.G.CO.A.1 | Write and Solve a System in Context  A Graph is a Set of All Solutions  Interpret Solutions to Systems  Graph Systems of Inequalities  A Graph is a Set of All Solutions  Geometry Vocabulary/Definitions |
| **Unit 9** Collect, Interpret, Analyze, and Summarize Data | M1.N.Q.A.1 M1.S.ID.A.1 M1.S.ID.A.2 M1.S.ID.A.3 M1.S.ID.C.5 M1.S.ID.C.6 M1.S.ID.C.7 | Choose Appropriate Units  Dot/Box/Stem Plots and Histograms  Compare Center and Spread  Interpret Center and Spread  Interpret LOBF in Context  Determine Correlation Coefficient  Correlation vs. Causation |