**SMMHS Aug 2016 – May 2017 Dr. Matthews MS Honors Algebra**

Assessed MYP Criterion: (2 of each criteria per semester)

A: Knowledge and Understanding

B: Investigating Patterns

C: Communication in Mathematics

D: Real World Application

**1st 9 Weeks:**

***\*\*Unit 1: Equations And Inequalities (5 weeks)***

**Week 1 (Aug 11-12)**

Welcome! Class Policies; Parent Letter; Pre-Assess and Goal Set Unit 1; HOM/HOI

**Week 2 (Aug 15-19)**

Solving Equations (Lessons 2.1-2.3)

**Week 3 (Aug 22-26)**

Solving Equations (Lesson 2.4, Supplemental Task)

**Week 4 (Aug 29-Sept 2)**

Solving Equations/ Solving Inequalities (Lesson 2.5, 3.2, 3.3, **Embedded Assessment**)

**Week 5 (Sept 6-9) (Labor Day 9/5)**

Absolute Value Equations and Inequalities (Lesson 4.1-4.2)

**Week 6 (Sept 12-16)**

**Unit 1 Assessment;**

**Begin Unit 2A:** Functions (Lesson 5.1)

***\*\*Unit 2: Functions (6 weeks)***

**Week 7 (Sept 19-23)**

Functions and Function Notations (Lesson 5.2-5.3)

**Week 8 (Sept 26-30)**

Interpreting Graphs of Functions (Lesson 6.1-6.2,)

**Embedded Assessment**

**Week 9 (Oct 3-6)**

**Unit 2A Assessment**; Rates of Change (Lesson 9.1-9.3)

**FALL BREAK OCTOBER (Oct 10-14) ☺**

**2nd 9 Weeks:**

**Week 10 (Oct 17-21)**

Linear Models(Lessons 11.1-11.4)

**REPORT CARDS 10/21/16**

**Week 11 (Oct 24-28)**

**Embedded Assessment**

Slope Intercept Form (Lessons 12.1-12.4,)

**Week 12 (Oct 31- Nov 4)**

Scatterplots and Linear Regression (Lessons 13.1-13.2, 38.1-38.2, 39.1-39.2)

**Week 13 (Nov 7-11)**

**Unit 2B Assessment & Embedded Assessment**

**Begin Unit 3:** Piece-wise Functions (Lessons 14.1-14.3)

***\*\*Unit 3: Functions (4 weeks)***

**Week 14 (Nov 14-18)**

Inequalities in Two Variables (Lessons 16.1-16.2)

**Embedded Assessment**

**Week 15 (Nov 21-22)**

Systems of Linear Functions (Lessons 17.1-17.3)

**Week 16 (Nov 28-Dec 2)**

Systems of Linear Functions (Lessons 17.4-17.5)

Systems of Linear Inequalities (Lessons 18.1)

**Week 17 (Dec 5-9)**

Systems of Linear Inequalities (Lessons 18.1)

**Unit 3 Assessment & Embedded Assessment**

**Week 18 (Dec 12-16)**

**Midterm Exam**

**Students report January 4th.**

***\*\*Unit 4: Exponents, Radicals, and Polynomials***

**3rd 9 Weeks:**

**Week 19 (Jan 4-6)**

Exponent Rules (Lessons 19.1-19.2)

**Week 20 (Jan 9-13)**

Exponent Rules (Lesson 19.3)

**Week 21 (Jan 17-20) (MLK Holiday 1/16)**

Operations with Radicals (Lessons 20.1-20.3)

**Week 22 (Jan 23-27)**

Geometric Sequences (Lessons 21.1-22.2)

Compound Interest (Lesson 23.1)

**Week 23 (Jan 30- Feb 3)**

**Unit 4A Assessment**

Adding and Subtracting Polynomials (Lesson 24.1-24.3)

**Week 24 (Feb 6-10)**

Multipying Polynomials (Lesson 25.1-25.3)

**Embedded Assessment**

**Week 25 (Feb 13-17)**

Factoring (Lesson 26.1-26.2)

**Week 26 (Feb 21-24) (President’s Day 2/20)**

Factoring Trinomials (Lesson 27.1-27.2)

**Week 27 (Feb 27-Mar 3)**

**Unit 4B Assessment**

**Begin Unit 5:**

***\*\*Unit 5 Quadratic Functions***

Modeling with Quadratic Functions (Lesson 29.1)

**Week 28 (March 6-10):**

Graphing And Analyzing Quadratic Functions (Lessons 29.2-30.1)

**Week 29 (March 13-16): End of 3rd Quarter**

Graphing and Analyzing Quadratic Functions (Lessons 30.2-30.3)

**Embedded Assessment**

**SPRING BREAK MARCH 17th-March 24 ☺**

**4th 9 Weeks: Statistics and Probability**

**Week 30 (March 27-31):**

**REPORT CARDS 3/31/17**

Solving Quadratic Functions (Lessons 31.1-31.3)

**Week 31 (April 3-7)**

Algebraic Methods of Solving Quadratic Equations (Lessons 32.1-32.2)

**Week 32 (April 10-13)**

**Good Friday 4/14**

Algebraic Methods of Solving Quadratic Equations (Lessons 32.3-32.5)

**Week 33 (April 17-21)**

Applying Quadratic Equations (Lessons 33.1-33.2)

**Embedded Assessment**

**Week 34 (April 24-28)** TBA: TN READY TESTING Window 4/17/17-5/5/17

Modeling with Functions (Lessons 34.1-34.2)

**Week 35 (May 1-5)**

Measures of Center and Spread

(Lessons 36.1-36.2)

**Week 36 (May 8-12)**

Bivariate Data (Lesson 40.1-40.2)

**Week 37 (May 15-19) 8th Grade Culminating Project (8th grade exam week)**

**Week 38 (May 22-25) (8th grade promotion date TBA)**

**Report Cards released May 26th.**

**SMMHS Aug 2016 – May 2017 Dr. Matthews and Mrs. Stewart 8th Grade Mathematics**

Assessed MYP Criterion: (2 of each criteria per semester)

A: Knowledge and Understanding

B: Investigating Patterns

C: Communication in Mathematics

D: Real World Application

**1st 8 Weeks: Functions**

**Week 1 (Aug 11-12)** Welcome! Class Policies; Parent Letter; Pre-Assess and Goal Set Unit 1; HOM/HOI

**Week 2 (Aug 15-19)** Understand and Construct Functions (8.F.A.1)**TNReady Lessons 6**

**Week 3 (Aug 22-26)** Compare Properties if Functions (8.F.A.2) **TNReady Lesson 7**

**Week 4 (Aug 29-Sept 2)** Construct LINEAR Functions/Slope-Intercept Equation (8.F.A.3) **TNReady Lesson 8** **Assessment of Lessons 6,7,8**

**Week 5 (Sept 6-9) (Labor Day 9/5)** Interpret Rate of Change (Slope) and Initial Value; X and Y Intercepts (8.F.B.4) **TNReady Lesson 9**

**Week 6 (Sept 12-16)** Story Graphs of Functional Relationships (8.F.B.5) **TNReady Lesson 10 Unit Interim Assessment Lessons 6 through 10**

**Week 7 (Sept 19-23)** Graph Proportional Relationships with DRT; Relate Unit Rate to Slope (8.EE.B.5) **TNReady Lesson 11**

**Week 8 (Sept 26-30)** Relate Slope to Similar Triangles (8.EE.B.6) **TNReady Lesson 12**

**Week 9 (Oct 3-6) Review and Assess Quarter 1** **Lessons 6-12** **END OF THE 1ST QUARTER**

**FALL BREAK OCTOBER (Oct 10-14) ☺**

**2nd 9 Weeks: Systems of Functions/Real Numbers and Operations**

**Week 10 (Oct 17-21)** Solve One Variable Multi-Step Equations (8.EE. C.7, 8.EE.C.7b) **TNReady Lesson 13 andREPORT CARDS 10/21/16**

**Week 11 (Oct 24-28)** Solutions of One Variable Equations 8. EE.C.7a **TNReady Lesson 14 *Assessment of Lessons 13-14***

**Week 12 (Oct 31- Nov 4)** Introduction and Graphing Systems of Equations (8.EE.C.8, 8.EE.C.8a) **TNReady Lesson 15**

**Week 13 (Nov 7-11)** Solve Systems with Algebra (8.EE.C.8b) **TNReady Lesson 16**

**Week 14 (Nov 14-18)** Solve Real World Systems (8.EE.C.8c) **TNReady Lesson 17**

**Unit Interim Assessment Lessons 15-17**

**Week 15 (Nov 21-22)** Exponent Rules (8.EE.A.1) **TNReady Lesson 1**

**-Thanksgiving Break ☺**

**Week 16 (Nov 28-Dec 2)**  Squares, Cubes, and Roots (8.EE.A.2) **TNReady Lesson 2**

**Week 17 (Dec 5-9)** Classify, Compare and Order Real Numbers (8.NS.A.1, 8.NS.A.2) **TNReady Lesson 3**

**Start Review for Semester Exam**

**Week 18 (Dec 12-16) Cumulative Semester Exam:** **TNReady Lessons 1 through 3 and 6 through 17**

**2nd QUARTER ENDS** Dec 16th is a half day for students.

**Students report January 4th.**

**3rd 10 Weeks: Geometry**

**Week 19 (Jan 4-6)** Translations (8.G.A.1, 8.G.A.1a, 8.G.A.1b) **TNReady Lesson 18 REPORT CARDS 1/6/17**

**Week 20 (Jan 9-13)** Reflections, Dilations, and Rotations (8.G.A.1, 8.G.A.1a, 8.G.A.1b, 8.G.A.1c, 8.G.A.2) **TNReady Lesson 18**

**Week 21 (Jan 17-20) (MLK Holiday 1/16)** Transformations and Similarity (8.G.A.3, 8.G.A.4)**TNReady Lessons 19 and 20** ***Assessment of Lessons 18-20***

**Week 22 (Jan 23-27)** Angles of Parallel Lines and Transversals (8.G.A.5) **TNReady Lesson 21**

**Week 23 (Jan 30- Feb 3)** Angles of Parallel Lines and Transversals (8.G.A.5) **TNReady Lesson 22  *Assessment of Lessons 21-22***

**Week 24 (Feb 6-10)** Pythagorean Theorem and Its Converse(8.G.B.6, 8.G.B.7) **TNReady Lessons 23 and 24**

**Week 25 (Feb 13-17)** Apply Pythagorean Theorem (8.G.B.7, 8.G.B.8) **TNReady Lesson 25**

***Assessment of Lessons 23-25***

**Week 26 (Feb 21-24) (President’s Day 2/20)** Understand Volume of Cones, Cylinders, and Spheres (8.G.B.9) **TNReady Lesson 26**

**Week 27 (Feb 27-Mar 3)** Solve Problems with Cones, Cylinders, and Spheres (8.G.B.9) **TNReady Lesson 27 *Assessment of Lessons 26-27***

**Week 28 (March 6-10): ??Extra Week Built In**

**Week 29 (March 13-16): Unit Interim Assessment** **End of 3rd Quarter**

**SPRING BREAK MARCH 17th-March 24 ☺**

**4th 9 Weeks: Statistics and Probability**

**Week 30 (March 27-31):** Construct and Interpret Scatterplots (8.SP.A.1) **TNReady Lesson 28**

**REPORT CARDS 3/31/17**

**Week 31 (April 3-7)** Scatterplots as linear models(y=mx+b) (8.SP.A.2) **TNReady Lesson 29**

**Week 32 (April 10-13)** Solve Problems using Scatterplots (8.SP.A.3) **TNReady Lesson 30 *Assessment of Lessons 28-30***

**Good Friday 4/14**

**Week 33 (April 17-21)** Data in Frequency Tables (8.SP.A.4)  **TNReady Lesson 31**

**Week 34 (April 24-28)** TBA: TN READY TESTING Window 4/17/17-5/5/17

**Week 35 (May 1-5)** Simplify Radicals

**Week 36 (May 8-12)** Add/Subtracts/Multiply Polynomials

**Week 37 (May 15-19) 8th Grade Culminating Project (8th grade exam week)**

**Week 38 (May 22-25) (8th grade promotion date TBA)**

**Report Cards released May 26th.**

Introduction to Scientific Notation (8.EE.A.3) **TNReady Lesson 4**

 Operations in Scientific Notation (8.EE.A.4) **TNReady Lesson 5**