## 2020-2021 <br> Year-at-a-Glance Snapshot Mrs. Smith Grade 7 Math

## August 17-September 30

Module 2: Operating with Signed Numbers Tentative Time: 27 days

| Topic | Standards | Mathia Workspaces | Tentative Timeframe | Resources, Supplemental, \& Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1: Adding and Subtracting Rational Numbers <br> - Adding Rational Numbers <br> - Subtracting Rational Numbers | $\begin{aligned} & \text { NS. } 1 \text { a-c } \\ & \text { NS. } 3 \end{aligned}$ | 4 | 8 days | - Math Tools: <br> - Braining Camp: Counters \& Number lines <br> - Prior Knowledge: Number line patterns (Smaller Left, Bigger Right), Combine Like Terms, simplifying expressions, fact families <br> - Vocabulary: Zero Pair, Additive Inverse, Opposite |
| 2: Multiplying and Dividing Rational Numbers <br> - Multiplying Rational Numbers <br> - Dividing Rational Numbers <br> - Using Order of Operations with Negative and Positive Integers | NS 1 d <br> NS 2 a-d <br> NS 3 <br> RP 3 | 6 | 19 days |  |

October 1- December 18

## Modules 3 and 5: Reasoning Algebraically and Constructing and Measuring Tentative Time: 47 Days

| Topic | Standards | Mathia Workspaces | Tentative Timeframe | Resources, Supplemental Work, \& Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1: Algebraic Expressions <br> - Variable Substitution <br> - Evaluate Algebraic Expressions <br> - Distributive Property and Factoring <br> - Combine Like Terms | $\begin{aligned} & \mathrm{EE} .3 \\ & \mathrm{EE} .1 \\ & \mathrm{EE} .2 \end{aligned}$ | 6 | 8 days | - Math Tools: <br> - Braining Camp: Algebra Tiles <br> - Patty Paper <br> - Bar Models <br> - Protractors <br> - Desmos: Graphing <br> - Graph Paper <br> - Prior Knowledge:Writing equations, solving one step equations, graphing inequalities, graphing on the coordinate plane <br> - Vocabulary: Inequality, Equation, Variable, Supplementary, Complementary, Vertical Angles, Linear Equations, Intersecting Lines |
| 2: Two-Step Equations and Inequalities <br> - Modeling Equations with Bar Models <br> - Writing and Solving 2-Step Equations <br> - Writing and Solving 2-Step Inequalities | EE.4a | 19 | 20 days |  |
| 1: Angles and Triangles (Module 5) <br> - Types of Angles: Supplementary, Complementary, and Vertical Angles <br> - Construct Triangles | $\begin{aligned} & \text { G. } 2 \\ & \text { G. } 5 \end{aligned}$ | 2 | 6 days |  |
| 3: Multiple Representations of Equations <br> - Graphing Equations \& Inequalities <br> - Linear Graphs and Tables <br> - Linear Equations | EE. 2 <br> EE.4a <br> EE. 4 | (part of topic 2's workspaces) | 13 days |  |

## January 11- March 26

## Module 1: Thinking Proportionally <br> Tentative Time: 51 Days

| Topic | Standards | Mathia Workspaces | Tentative Timeframe | Resources, Supplemental Work, \& Notes |
| :---: | :---: | :---: | :---: | :---: |
| 1: Circles and Ratio <br> - Finding Circumference and Area | G. 4 | 2 | 5 days | - Math Tools: <br> - Number Strings: Pam Harris' Course <br> - Compass <br> - Desmos: Graphing <br> - Prior Knowledge: Ratio notation, Scaling, Unit Rate, Equivalent Ratios, Coordinate Plane and Tables, Calculating basic percents <br> - Vocabulary: Circumference, Area, Radius, Diameter, Scaling Up or Down, Direct Variation, Proportional, Not Proportional, $\mathrm{y}=\mathrm{kx}$, Constant of Proportionality, Percent of Increase, Percent of Decrease, Commission, Simple Interest |
| 2: Fractional Rates <br> - Unit Rate <br> - Solving Proportions | RP. 1 <br> RP. 2c <br> RP. 3 | 7 | 6 days |  |
| 3: Proportionality <br> - Proportional and NonProportional Relationships on Graphs and Tables <br> - Finding the Constant of Proportionality | RP. 2a-d | 4 | 20 days |  |
| 4: Proportional Relationships <br> - Calculate Percents, Mark Ups, Mark Downs, Tips, Commission, Simple Interest, Sales Tax, Income Tax, Fees, and Percent of Increase and Decrease <br> - Scale Drawings | $\begin{aligned} & \text { RP. } 3 \\ & \text { G. } 6 \\ & \text { G. } 1 \end{aligned}$ | 12 | 20 days |  |

## April 12-30 and May 24-June 4

## Module 5 and 4: Constructing and Measuring and Analyzing Populations and Probability SBAC Testing Review <br> Tentative Time: 15 days

| Topic | Standards | Mathia Workspaces | Tentative Timeframe | Related Supplemental Work \& Enrichment Activities |
| :---: | :---: | :---: | :---: | :---: |
| 2: Three- Dimensional Figures <br> - Cross Sections <br> - Volume of Right Prisms | $\begin{array}{\|l} \hline \text { G. } 3 \\ \text { G. } 6 \end{array}$ | 5 | 4 days | - Math Tools: <br> - Play Dough \& Wire <br> - Dice <br> - Prior Knowledge: names of 3-D shapes, Probability, <br> - Vocabulary: Experimental Probability, Theoretical Probability, Cross Section, Compound, |
| 1: Introduction to Probability <br> - Probability Models <br> - Determine Probability of Simple Events <br> - Use simulations to explore the difference between theoretical and experimental probability | SP. 5 <br> SP. 7 <br> SP. 6 <br> SP. 7a-b <br> RP. 3 | 3 | 4 days |  |
| 2: Compound Probability <br> - Organizing outcomes with tree diagrams, arrays, lists, | SP. 6 <br> SP. 7a-b <br> SP. 8 a-c | 3 | 3 days |  |
| 3: Drawing Inferences <br> - Collect random samples to to represent data | SP. 1 <br> SP. 2 <br> SP. 3 <br> SP. 4 | 3 | 4 days |  |

