| Unit/Chapter/Lesson | Lesson Description   | Approximate<br>Date Covered | IN 7th Grade Math<br>Standards Covered in<br>Lesson and/or Homework | Key Questions   | Resources/Activities                         | Vocabulary                               | Assessments  |
|---------------------|--|-----------------------------|---|---|--|--|--|
| Unit 1 Lesson 1     | Order Of Operations  | August 21                   | 7.C.8, 7.AF.1, Al.PS.2  | In what order do we<br>perform arithmetic<br>operations to evaluate<br>them?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Order of Operations                      | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 1 Lesson 2     | Negative Numbers, Opposites,<br>Absolute Value, Inequalities                                   | August 23                   | AI.L.9  | What are opposite<br>numbers? How do we<br>represent absolute value<br>on a number line?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Opposite numbers,<br>absolute value      | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 1 Lesson 3     | Review Of Sign Rules For<br>Arithmetic Operations, Unit<br>Multipliers                         | August 27                   | 7.C.1   | How do we perform<br>operations on postive and<br>negative numbers?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Unit multiplier                          | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 1 Lesson 4     | Evaluating Algebraic<br>Expressions, Combining Like<br>Terms                                   | August 31                   | 7.C.3   | What are the rules for<br>combining like terms?<br>How do we evaluate<br>algebraic expressions?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Algebraic expression, combine like terms | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 1 Lesson 5     | Evaluating Expressions That<br>Distribute Negative Numbers<br>Nested Group                     | September 5                 | 7.PS.7, Al.PS.7, 7.C.3, 7.AF.1                                      | How do we distribute<br>negative numbers across<br>parentheses?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Distribute, distributive<br>property     | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |
| Unit 2 Lesson 1     | Solving One-Step Linear<br>Equations   | September 13                | AI.L.2, AI.PS.2, AI.L.1   | How do we solve 1-step<br>equations?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Equation                                 | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 2 Lesson 2     | Solving Two-Step Linear<br>Equations   | September 17                | AI.L.2, AI.PS.2, AI.L.1   | How do we solve 2-step<br>equations?  | Notetaking Guide,<br>Notes, Mathweb<br>Links |  | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 2 Lesson 3     | Solving Linear Equations By<br>Combining Like Terms, Solving<br>Multiple Step Linear Equations | September 19                | AI.L.2, AI.PS.2, AI.L.1   | In what order to we<br>perform the steps to solve<br>multi-step equations?<br>How do we combine like<br>terms when we solve<br>equations? | Notetaking Guide,<br>Notes, Mathweb<br>Links |  | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 2 Lesson 4     | Solving Linear Equations With<br>Variables On Both Sides                                       | September 21                | AI.L.2, AI.PS.2, AI.L.1   | How do we solve<br>equations with variables<br>on both sides?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |  | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |

| Unit 3 Lesson 1 | Inequality Statements  | October 1   | Al.L.2, Al.L.1, Al.L.7, Al.SEI.3 | How do we graphically<br>represent inequlalites?<br>How do we translate real-<br>world problems into<br>mathematical inequalities? | Notetaking Guide,<br>Notes, Mathweb<br>Links | Inequality                                | Homework, Class<br>Observations,<br>Technological<br>Assessment, Tests,<br>Timings     |
|-----------------|--|-------------|----------------------------------|--|--|---|--|
| Unit 3 Lesson 2 | Solving Linear Inequalities  | October 3   | Al.L.2                           | How do we solve linear<br>inequalities?  | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |
| Unit 4 Lesson 1 | Converting Word Expressions<br>Into Algebraic Expressions,<br>Solving Simple Word Problems | October 15  | Al.L.5                           | How do we translate real-<br>world problems into<br>algebraic equations?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 4 Lesson 2 | Solving Perimeter And Area<br>Word Problems  | October 17  | Al.L.5                           | How can we algebraically<br>represent perimeter and<br>area problems to solve<br>them?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 4 Lesson 3 | Percent Problems   | October 30  | Al.L.5                           | How can we algebraically<br>represent percent<br>problems to solve them?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 4 Lesson 4 | Moore Area, Perimeter, And<br>Percent Problems   | November 5  | Al.L.5                           |  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Area, perimeter,<br>percent               | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 4 Lesson 5 | Solving Abstract Equations   | November 9  | AI.L.11, AI.PS.2                 | How do we isolate one<br>variable in an equations<br>that has multiple<br>variables?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Abstract equation                         | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |
| Unit 5 Lesson 1 | The Coordinate Axes,<br>Reflections, And Translations                                      | November 20 |                                  | What does it mean to<br>reflect or translate a<br>geometric object on a<br>coordinate plane?                                       | Notetaking Guide,<br>Notes, Mathweb<br>Links | Reflection, translation, coordinate plane | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 5 Lesson 2 | Relations: Domain And Range  | November 26 | Al.F.1, Al.F.3                   | How do we find the domain and range of a relation?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Relation                                  | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 5 Lesson 3 | Functions And Function<br>Notation   | November 28 | AI.F.4                           | How do we determine if a relation is a function?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Function                                  | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |

| Unit 5 Lesson 4 | More Practice With Functions  | November 30 | AI.F.4          |  | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment, Tests,<br>Timings     |
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| Unit 5 Lesson 5 | Function Word Problems,<br>Constant Rates of Change   | December 4  | AI.DS.3, AI.L.5 | How do we translate real-<br>world problems into<br>functions? How do we<br>interpret the rate of<br>change of a mathematical<br>problem in real-world<br>terms? | Notetaking Guide,<br>Notes, Mathweb<br>Links | Rate of change                              | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 5 Lesson 6 | Graphical Representations Of<br>Functions, Independent And<br>Dependent Variables                           | December 6  | AI.F.2          | How do we graph<br>functions? Which of the<br>variables are independent<br>and which are dependent?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Independent variable,<br>dependent variable | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |
| Unit 6 Lesson 1 | Linear Function Definition,<br>Plotting Points And Verifying<br>With A Graphing Calculator                  | January 10  | AI.L.4, AI.L.5  | How do we use a graphing calculator to plot points and draw a line?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Linear function                             | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 6 Lesson 2 | Slope   | January 14  | AI.L.4, AI.L.5  | How do we calculate and interpret slope?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Slope                                       | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 6 Lesson 3 | Graphing A Line Given A Point<br>And A Slope, Slope Intercept<br>Form Of A Linear Function                  | January 16  | AI.L.6          | How do we graph a line<br>given the a point on the<br>line and its slope?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Slope-intercept form                        | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 6 Lesson 4 | Converting Linear Functions To<br>Slope Intercept Form, Verifying<br>Solutions To Linear Equations          | January 18  | AI.L.6          | How do we convert linear<br>equations to slope-<br>intercept form? How do<br>we verify the solutions to<br>linear equations?                                     | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 6 Lesson 5 | Finding Function Rules Given<br>Points In A Chart, Special Cases<br>Of Linear Functions                     | January 22  | AI.L.6          | How do we find function<br>rules given points in a<br>table or chart?  | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 6 Lesson 6 | Putting It All Together -<br>Interpreting Linear Graphs   | January 28  | Al.PS.8         | How do we interpret linear<br>graphs in various real-<br>world contexts?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 6 Lesson 7 | Comparing Linear Graphs Using<br>A Graphing Calculator,<br>Evaluating Linear Functions<br>With A Calculator | February 4  | AI.SEI.4        | How can we evaluate and<br>compare linear functions<br>using a graphing<br>calculator?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |   | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |

| Unit 7 Lesson 1 | Writing The Equation Of A Line<br>Given The Slope And One Other<br>Piece Of Information                          | February 12 | AI.L.6                  | How do we write the<br>equation of a line given<br>the slope and another<br>piece of information?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |  | Homework, Class<br>Observations,<br>Technological<br>Assessment, Tests,<br>Timings     |
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| Unit 7 Lesson 2 | Writing The Equation Of A Line<br>Given Two Points, Writing The<br>Equations Of Horizontal And<br>Vertical Lines | February 14 | AI.L.6                  | How do we write the<br>equation of a line given<br>two points? What is the<br>equation of a vertical line?<br>What is the equation of a<br>horizontal line? | Notetaking Guide,<br>Notes, Mathweb<br>Links | Horizonal line, Vertical<br>line       | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 7 Lesson 3 | Perpendicular And Parallel Lines   | February 20 | AI.L.6                  | How do we find the equations of parallel and perpendicular lines?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Parallel lines,<br>perpendicular lines | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 7 Lesson 4 | Linear Function Word Problems,<br>Calculator Tables  | February 25 | Al.L.2, Al.L.6          | How can we use linear<br>functions to model real-<br>world problems?  | Notetaking Guide,<br>Notes, Mathweb<br>Links |  | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |
| Unit 8 Lesson 1 | Manuel Scatter Plots,<br>Correlation   | March 5     | AI.L.4, AI.L.5          | How can we determine<br>the type of correlation<br>between two variables?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Scatter plot,<br>correlation           | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 8 Lesson 2 | Scatter Plots In Linear<br>Regression On A Graphing<br>Calculator  | March 7     | AI.L.4, AI.L.5, AI.DS.3 | How do we perform linear<br>regression on a set of data<br>using a graphing<br>calculator?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Linear regression                      | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 8 Lesson 3 | Interpretation Of Linear Data<br>Using A Graphing Calculator   | March 11    | AI.L.4, AI.L.5, Al.DS.2 | How can we use a graphing calculator to interpret linear data?  | Notetaking Guide,<br>Notes, Mathweb<br>Links |  | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |
| Unit 9 Lesson 1 | The Meaning Of The Solution To<br>A System Of Linear Equations   | March 19    | Al.PS.2, Al.SEI.3       | How do we interpret the solution to a system of linear equations?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | System of equations                    | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 9 Lesson 2 | Solving Two Linear Equations By<br>Graphing  | March 21    | AI.PS.2, AI.SEI.3       | How do we solve a system<br>of two linear equations by<br>graphing?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Graphing method                        | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 9 Lesson 3 | Solving Two Linear Equations By<br>Substitution  | April 1     | AI.PS.2, AI.SEI.3       | How do we solve a system<br>of two linear equations by<br>substitution?   | Notetaking Guide,<br>Notes, Mathweb<br>Links | Substitution method                    | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |

| Unit 9 Lesson 4  | Solving Two Linear Equations By<br>Elimination     | April 3  | Al.PS.2, Al.SEI.3 | How do we solve a system<br>of two linear equations by<br>elimination?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Elimination method | Homework, Class<br>Observations,<br>Technological<br>Assessment, Tests,<br>Timings     |
|------------------|--|----------|-------------------|---|--|--------------------|--|
| Unit 9 Lesson 5  | Graphing Calculator Solutions<br>Of Linear Systems | April 5  | AI.PS.2, AI.SEI.3 | How do we use a graphing<br>calculator to solve a<br>system of two equations?   | Notetaking Guide,<br>Notes, Mathweb<br>Links |                    | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 9 Lesson 6  | Solving For 2 Variables In Word<br>Problems        | April 9  | AI.PS.2, AI.SEI.3 | How do we solve real-<br>world problems using<br>systems of equations?  | Notetaking Guide,<br>Notes, Mathweb<br>Links |                    | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |
| Unit 10 Lesson 1 | Direct Variation                                   | April 17 | Al.L.4            | How do we model real-<br>world problems using<br>direct variation?  | Notetaking Guide,<br>Notes, Mathweb<br>Links | Direct variation   | Homework, Class<br>Observations,<br>Technological<br>Assessment                        |
| Unit 10 Lesson 2 | Indirect (Inverse) Variation                       | April 22 | Al.L.4            | How do we model real-<br>world problems using<br>indirect variation? How<br>do we distinguish between<br>direct and indirect<br>variation? How can we tell<br>which type of variation is<br>at work given a set of<br>data? | Notetaking Guide,<br>Notes, Mathweb<br>Links | Inverse variation  | Homework, Class<br>Observations,<br>Technological<br>Assessment, Written<br>Assessment |