# Phenix City Schools 2017-2018 <br> $4^{\text {th }}$ grade Math Pacing Guide 

| Unit 1 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Arrays, Factors, <br> and <br> Multiplicative <br> Comparison |  | August <br> $10^{\text {th }}-30^{\text {th }}$ | $40 A 1-4$ | Array <br> Composite |
| Representing <br> Multiplication <br> with Arrays | Investigation 1 <br> $1.1-1.8$ | 8 Days | Assess 40A1 | Dimension <br> Factor <br> Multiple <br> Prime <br> Product |
| Finding Factors | Investigation 2 <br> $2.1-2.4$ | 5 Days | Assess 40A4 |  |


| Unit 2 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Generating and <br> Representing <br> Measurement <br> and Data |  | August 31 ${ }^{\text {st }}-$ <br> September 15 | 4MD1-2, 4 | Bar graph <br> Data <br> Line plot |
| Modeling with <br> Data | Investigation 1 <br> 1.1-1.5 | 5 Days | Assess 4MD4 |  |
| Range |  |  |  |  |
| Using Data to <br> Compare | Investigation 2 <br> $2.1-2.6$ | 5 Days |  |  |


| Unit 3 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Multiple Towers <br> and Cluster <br> Problems |  | September 18 <br> th <br> - October 12 | 4OA1-4 <br> $4 N B T 5-6 ~$ | Array <br> Division <br> Doubled <br> Halved <br> Factor |
| Breaking Apart <br> Multiplication <br> Problems | Investigation 1 <br> 1.1-1.5 | 5 Days |  | Multiple <br> Product <br> Remainder |
| Solving Division <br> Problems | Investigation 2 <br> 2.1-2.6 | 4 Days | Assess 4OA2 <br> (2-digit by <br> 1-digit) |  |
| Strategies for | Investigation 3 | 7 Days | Assess 4NBT5 <br> (2-digit by <br> 1-digit) |  |
| 3ultiplication |  |  |  |  |


| Unit 4 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Measuring and Classifying Shapes |  | October $13^{\text {th }}$ - <br> November $16^{\text {th }}$ | 4OA3 4NBT4.6 4MD1-3,5-7 4G1-3 | Acute angle Angle Centimeter Degrees Feet |
| Linear Measurements | Investigation 1 1.1-1.5 | 5 Days | Assess 4MD1 | Hexagon Inches Line linear Measurement |
| Sorting and Classifying Polygons | $\begin{gathered} \text { Investigation } 2 \\ 2.1-2.5 \end{gathered}$ | 4 Days | Assess 4G1 and 4G2 | Line of symmetry <br> Line segment Meters Metric system Obtuse angle Parallel |
| Measuring Angles | Investigation 3 3.1-3.4 | 4 Days | Assess 4MD5-7 | Parallelogram Perimeter Perpendicular Point |
| Symmetry and Area | Investigation 4 4.1-4.6 | 6 Days | Assess 4MD3 and 4G3 | Quadrilateral Ray Side Square unit Vertex Yard |


| Unit 5 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Large Numbers and Landmarks |  | $\begin{aligned} & \text { November } 27^{\text {th }}- \\ & \text { January } 12^{\text {th }} \end{aligned}$ | $\begin{gathered} \text { 4NBT1-4 } \\ \text { 4MD2 } \\ \text { 4OA3 } \end{gathered}$ | Addition strategies Place value Subtraction strategies |
| Studying Addition | Investigation 1 1.1-1.6 | 6 Days | Assess 4NBT4 and 40A3 (4 digit add, sub, multiply) |  |
| Studying Subtraction | $\begin{gathered} \text { Investigation } 2 \\ 2.1-2.7 \end{gathered}$ | 7 Days |  |  |
| Adding and Subtracting Large Numbers | Investigation 3 3.1-3.6 | 6 Days | Assess 4NBT1 and 4NBT2 |  |


| Unit 6 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Fraction Cards and Decimal Grids |  | January $16^{\text {th }}$ - <br> February $27^{\text {th }}$ | 4NBT1 4NF1-7 4MD2, 4 | Decimal point Decimals Denominator |
| Parts of Rectangles | Investigation 1 1.1-1.6 | 6 Days | Assess 4NF1 | Equivalent <br> Fractions <br> Numerator One hundredth |
| Comparing | Investigation 2 | 9 Days | Assess 4NF2, | One tenth |
| Fractions and Decimals | 2.1-2.8 |  | 4NF6, and 4NF7 | Sixths <br> Thirds <br> Twelfths |
| Adding and Subtracting Fractions and Decimals | $\begin{gathered} \text { Investigation } 3 \\ 3.1-3.6 \end{gathered}$ | 5 Days | Assess 4NF3 |  |
| Computation with Rational Numbers | Investigation 4 4.1-4.4 | 5 Days | Assess 4NF4 |  |


| Unit 7 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| How Many <br> Packages and <br> Groups |  | February 28 <br> th <br> April 6 | 4OA2-4 <br> 4NBT5-6 <br> 4MD1-2 | Capacity <br> Division <br> Divisor <br> Estimate |
| Multiplication <br> with 2-Digit <br> Numbers | Investigation 1 <br> 1.1-1.7 | 7 Days |  | Mass <br> Multiple |
| Strategies for <br> Multiplication | Investigation 2 <br> 2.1-2.5 | 4 Days | Assess 4NBT5 <br> Remainder <br> (2-digit by 2- | Weight |
| Solving Division <br> Problems | Investigation 3 <br> 3.1-3.6 | 6 Days | Assess 4NBT3\&6 |  |


| Unit 8 | Sessions | Time Frame | CCSS | Vocabulary |
| :---: | :---: | :---: | :---: | :---: |
| Penny Jars and Towers |  | $\begin{gathered} \text { April } 18^{\text {th }}- \\ \text { May } 8^{\text {th }} \end{gathered}$ | $\begin{aligned} & \text { 4OA3 } \\ & \text { 4OA5 } \\ & \text { 4MD2 } \end{aligned}$ | Equation Expression Representation |
| Representing and Analyzing Patterns | Investigation 1 1.1-1.10 | $13^{\text {th }}$ Days | $\begin{aligned} & \text { 4OA5 part } 1 \\ & \text { 4OA5 part } 2 \end{aligned}$ |  |

