See NJSLS Math
See 4th Grade Instructional Framework
Units highlighted yellow take PRIORITY for this school year based on guidance from Priority Instructional Content from Achieve the Core.

Units highlighted in blue were not taught/not taught in depth during the 2020-2021 school year.
Notes in Red are guidance from 2020-2021 Priority Instructional Content from Achieve the Core

| 4 / Math / Trimester 1 (51 days) |  |  |  |  |
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| Time Frame | Primary Math Skills | Instructional Strategy | Academic Vocab. | Standards \& M.P. |
| $5-7$ days | Build a Math Community <br> - Intro math routines <br> - Fact fluency routine <br> - Classroom Discussion Norms <br> - Navigate and Practice using enVision Online Digital Platform <br> - Assessments (Grade 4 Readiness Test) <br> - \|x| Diagnostic | Discuss Productive Struggle <br> Growth mindset vs. fixed mindset <br> Model \& Practice Daily Math Routines <br> Model and Practice using On-Line Programs <br> Develop Classroom Discussion Norms <br> Assess student's math readiness for 4th grade | Productive struggle <br> Growth mindset <br> Fixed Mindset | MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


| 10 days | Topic 1: Generalize Place Value Understanding <br> - Numbers through One Million <br> - Place Value Relationships <br> - Compare Whole Numbers <br> - Round Whole Numbers <br> - Construct Arguments <br> NO special considerations for curricula well aligned to generalizing place value understanding, as detailed in this cluster. <br> Time spent on instruction should NOT be reduced. | enVisions Topic 1: Follow Instructional Framework (3 part lesson format) <br> enVisions Digital Platform <br> Place Value Chart, Number Line Games: (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Reflex (Multiplication \& Division) <br> Prodigy <br> IXL (A.Number Sense) <br> Anchor Charts/Vocab. Word Walls <br> Fact Fluency Drills <br> Manipulatives: Base Ten Blocks <br> Provide students with opportunities to explain their reasoning/ and with using visual models. | Place value <br> Expanding Form <br> Greater than symbol <br> Less than symbol <br> Rounding <br> Conjecture <br> Millions <br> Period <br> *New words are in Bold | 4.NBT.A. 1 <br> 4.NBT.A. 2 <br> 4.NBT.A. 3 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |
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| 9 days | Topic 2: Fluently Add and Subtract Multi-Digit Whole Numbers | enVisions Topic 2: Follow Instructional Framework (3 part lesson format) | Commutative property of addition | $\begin{aligned} & \text { 4.NBT. } 4 \\ & \text { 4.0A.A3 } \end{aligned}$ |


|  | - Finding Sums and Differences with Mental Math <br> - Estimate Sums and Differences <br> - Add Whole Numbers <br> - Add Greater Numbers <br> - Subtract Whole Numbers <br> - Subtract Greater Numbers <br> - Subtract Across Zeros <br> - Problem Solving: Reasoning <br> Required Fluency for Grade 4 Add/Subtract within 1,000,000 <br> In relation to fluency expectations for subtracting multi-digit numbers emphasize problems with only one regrouping step (4.NTB.B.4) in order to reduce algorithmic complexity. | enVisions Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Walls <br> Reflex (Multiplication \& Division) <br> Prodigy <br> IXL (B.Addition \& C.Subtraction) <br> Fact Fluency Drills <br> Place Value charts <br> Manipulatives: Base Ten Blocks <br> Provide students with opportunities to explain their reasoning/ and with using visual models. | Associative property of addition <br> Identify property of addition <br> Counting On <br> Compensation <br> Inverse Operation <br> Variable <br> Algorithm <br> *New words are in Bold | MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |
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| 7 days | Topic 7: Factors and Multiples <br> - Understand Factors <br> - Factors <br> - Repeated Reasoning | enVisions Topic 7: Follow Instructional Framework (3 part lesson format) <br> enVisions Digital Platform | Factor <br> Factor pairs <br> Multiples <br> Generalize <br> Prime number | 4.0A.B. 4 4.NT.B. 5 <br> MP. 1 <br> MP. 2 |


|  | - Prime and Composite <br> Numbers <br> - Multiples <br> (Topic 7 was moved before Topic 3 as it develops student understanding of factors and multiples by going back to accessing basic understanding of multiplication and division. It is important to access this understanding prior to developing understanding of multi-digit multiplication and division application of strategies) <br> Incorporate opportunities to solidify the fluency expectations of 3.OA.C. 7 by giving additional practice sets related to products of single-digit factors and related quotients (with unknowns in all positions) into the grade 4 work of gaining familiarity with factors and multiples. | Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers Anchor Charts/Vocab. Word Walls <br> Reflex Math (Multiplication \& Division) <br> Prodigy <br> IXL (A.Number Sense 17-18; D. Multiplication 1-8) <br> Fact Fluency Drills <br> Manipulatives: 2 Color Square Counters <br> Provide students with opportunities to explain their reasoning/ and with using visual models | Composite <br> *New words are in Bold | MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |
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| 13 days | Topic 3: Use Strategies \& Properties to Multiply by 1-Digit Numbers <br> - Multiply by Multiples of 10, 100. And 1,000 <br> - Estimate Products | enVisions Topic 3: Follow Instructional Framework (3 part lesson format) <br> enVision Digital Platform | Associative property of multiplication <br> Distributive property <br> Compensation <br> Commutative property of multiplication Numerical expression | 4.NBT.B. 5 <br> 4.OA.A. 3 <br> 4.OA.A. 2 <br> MP. 1 <br> MP. 2 <br> MP. 3 |


|  | - Use Arrays and Partial Products to Multiply <br> - Use Area Models and Partial Products to Multiply <br> - More Use Area Models and Partial Products to Multiply <br> - Mental Math Strategies for Multiplication <br> - Choose a Strategy to Multiply <br> The standard algorithm is NOT taught in 4th grade: Students are shown this method in 5th grade. <br> Incorporate fluency expectations of 3.OA.C. 7 by giving additional practice sets related to products of single-digit factors and related quotients (with unknowns in all positions) into the grade 4 work on multi-digit multiplication and division (4.NBT. 5 \& $6)$. <br> Major Work: Multiplication and division of whole numbers and fractions-concepts, skills, and problem solving. | Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Walls <br> Reflex (Multiplication \& Division) <br> Prodigy <br> IXL (D. Multiplication 23-31) <br> Fact Fluency Drills <br> Manipulatives: Base Ten Blocks <br> Provide students with opportunities to explain their reasoning/ and with using visual models. | Partial Products <br> *New words are in Bold | MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |
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| the 1st trimester. | - Use models to multiply 2-Digit numbers by multiples of 10 <br> - Estimate: Use rounding or compatible numbers <br> - Use arrays and partial products to multiply <br> - Use area models and partial products to multiply. <br> Incorporate fluency expectations of 3.OA.C. 7 by giving additional practice sets related to products of single-digit factors and related quotients (with unknowns in all positions) into the grade 4 work on multi-digit multiplication and division (4.NBT. 5 \& 6). <br> Major Work: Multiplication and division of whole numbers and fractions-concepts, skills, and problem solving. | Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) <br> IXL (D. Multiplication 9-22) <br> Fact Fluency Drills <br> Manipulatives: Base Ten Blocks Provide students with opportunities to explain their reasoning/ and with using visual models. | Area model <br> Partial products algorithm Compatible numbers <br> *New words are in Bold | MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |
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| 14 days | Topic 5: Use Strategies and Properties to Divide by 1-Digit Numbers <br> - Use mental math to find quotients <br> - Use mental math to estimate quotients. <br> - Use mental math to estimate quotients for greater dividends. <br> - Interpret remainders <br> - Use partial quotients to divide <br> - Use sharing to divide | enVisions Topic 5: Follow Instructional Framework (3 part lesson format) <br> enVisions Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall | Equation <br> Divisor <br> Dividend <br> Quotient <br> Compatible Numbers <br> Remainder <br> Partial quotients <br> *New words are in Bold | 4. NTB.B. 6 <br> 4. OA.A. 3 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


|  | - Choosing a strategy to divide <br> Incorporate fluency expectations of 3.OA.C. 7 by giving additional practice sets related to products of single-digit factors and related quotients (with unknowns in all positions) into the grade 4 work on multi-digit multiplication and division (4.NBT. 5 \& $6)$. <br> There are NO fluency expectations for multi-digit multiplication or division in grade 4; repetitive fluency exercises are not required. <br> Major Work: Multiplication and division of whole numbers and fractions-concepts, skills, and problem solving. | Reflex (Multiplication \& Division) <br> Prodigy <br> IXL (E.Division) <br> Fact Fluency Drills <br> Manipulatives: 2-Color Counters \& Base Ten Blocks <br> Provide students with opportunities to explain their reasoning/ and with using visual models. |  |  |
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| 9 days | Topic 6: Use Operations with Whole Numbers to Solve Problems <br> - Solve comparison problems <br> - Model Multi-Step Problems <br> - Solve Multi-Step Problems <br> NO special considerations for curricula well aligned to analyzing and solving multi-step word problems with the four operations (4.OA.3), and extending multiplicative thinking beyond grade 3 to solve problems involving comparisons and the idea of times-as-many/times-as-much | enVisions Topic 6: Follow Instructional Framework (3 part lesson format) <br> enVision Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) | Variable Equation | 4.OA.A. 1 <br> 4.OA.A. 2 <br> 4.OA.A. 3 <br> 4.NBT.B. 5 <br> 4.NBT.B. 6 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


|  | (4.OA.2). | Prodigy <br> IXL (F.Mixed Operations) <br> Fact Fluency Drills <br> Provide students with opportunities to explain their reasoning/ and with using visual models. |  |  |
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| 7 days | Topic 8: Extend Understanding of Fraction Equivalence and Ordering <br> - Equivalent Fractions:Area Models <br> - Equivalent Fractions:Number Lines <br> - Generate Equivalent Fractions using multiplication <br> - Generate Equivalent Fractions using division. <br> - Use benchmarks to compare fractions <br> - Compare Fractions <br> NO special considerations for curricula well aligned to fraction | enVisions Topic 8: Follow Instructional Framework (3 part lesson format) <br> enVisions Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) Prodigy | Equivalent fraction <br> Fraction <br> Numerator <br> Denominator <br> Identify property of multiplication <br> Common factor Benchmark fraction <br> *New words are in Bold | 4. NF.A. 1 <br> 4. NF.A. 2 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


|  | equivalence and ordering, as detailed in this cluster. Incorporate some foundational work on simple equivalent fractions (3.NF.A.3). Time spent on instruction and practice should NOT be reduced. <br> Incorporate some foundational work on the meaning of the unit fraction (3.NF.A. 1 \& 2), especially through partitioning the whole on a number line diagram. | IXL (P. Fraction Equivalence \& Ordering) <br> Fact Fluency Drills <br> Number Lines <br> Manipulatives: Fraction Strips <br> Provide students with opportunities to explain their reasoning/ and with using visual models. |  |  |
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| 14 days | Topic 9: Understand Addition and Subtraction of Fractions <br> - Model addition of fractions <br> - Decompose fractions <br> - Add fractions with like denominators <br> - Model subtraction of fractions <br> - Subtract fractions with like denominators <br> - Add \& subtract fractions with like denominators <br> - Model addition and subtraction of mixed numbers <br> - Add mixed numbers <br> - Subtract mixed numbers | enVisions Topic 9: Follow Instructional Framework (3 part lesson format) <br> enVision Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) <br> Prodigy | Fraction <br> Numerator <br> Denominator <br> Reasonable <br> Equivalent fraction <br> Decompose <br> Compose <br> Mixed Fraction <br> *New words are in Bold | 4.NF.B.3a <br> 4.NF.B.3b <br> 4.NF.B.3c <br> 4.NF.B.3d <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


|  | fractions to determine sums and <br> products, not committing calculation <br> rules to memory or engaging in <br> repetitive fluency exercises. <br> Eliminate lessons and problems that <br> do not strongly reinforce the fraction <br> work of this grade. (Achieve the Core) | IXL (Q. Add \& Subtract Fractions <br> with like denominators \& R. Add <br> and Subtract Fractions with unlike <br> denominators) <br> Fact Fluency Drills <br> Number Lines <br> Manipulatives: Fraction strips <br> Provide students with opportunities <br> to explain their reasoning/ and with <br> using visual models. |  |
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|  |  | Fact Fluency Drills <br> Manipulatives: Fraction Strips/Clock Face <br> Provide students with opportunities to explain their reasoning/ and with using visual models. |  |  |
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| 10 days | Topic 12: Understand and Compare Decimals <br> - Fractions and decimals <br> - Fractions and decimals on the number line <br> - Compare decimals <br> - Add fractions with denominators of 10 and 100 <br> - Solve world problems involving money <br> NO special considerations for curricula well aligned to concepts of decimal fractions, as detailed in this cluster. <br> Time spent on instruction and practice should NOT be reduced. | enVisions Topic 12: Follow Instructional Framework (3 part lesson format) <br> enVision Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) <br> Prodigy <br> IXL (T. Decimals) <br> Fact Fluency Drills <br> Hundredths grid/Place Value Chart <br> Manipulatives: 2 Color <br> Counters/Decimal Models/Decimal | Tenth <br> Hundredth <br> Decimal <br> Decimal point <br> *New words are in Bold | 4.NF.C. 5 <br> 4.NF.C. 6 <br> 4.NF.C. 7 <br> 4.MD.A. 2 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


|  |  | Provide students with opportunities to explain their reasoning/ and with using visual models. |  |  |
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| 10 days | Topic 15: Geometric Measurements: Understand Concepts of Angle Measurements <br> - Lines, rays, \& angles <br> - Understand angles and unit angles <br> - Measure with unit angles <br> - Measure and draw angles <br> - Add and subtract angle measures <br> Emphasize the foundational understanding of one-degree angle as a unit of a measure (4.MD.C.5a) and use that as the basis for measuring and drawing angles with a protractor. <br> Eliminate lessons on recognizing angle measure additives. | enVisions Topic 15: Follow Instructional Framework (3 part lesson format) <br> enVisions Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) <br> Prodigy <br>  <br> Z. Angles) <br> Fact Fluency Drills <br> Manipulatives: Pattern Blocks/Protractors/Clock Face | Line <br> Right angle <br> Vertex <br> Point <br> Line Segment <br> Ray <br> Acute angle <br> Obtuse angle <br> Straight angle <br> Reflex angle <br> Degree <br> Unit angle <br> Angle measure <br> Protractor <br> *New words are in Bold | 4.MD.C. 5 <br> 4.MD.C.5a <br> 4.MD.C.5b <br> 4.MD.C. 6 <br> 4.MD.C. 7 <br> 4.G.A. 1 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


|  |  | Provide students with opportunities to explain their reasoning/ and with using visual models. |  |  |
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| 10 days | Topic 16: Lines, Angles, and Shapes <br> - Lines <br> - Classify triangles <br> - Classify quadrilaterals <br> - Line symmetry <br> - Draw shapes with line symmetry <br> Combine lessons on drawing and identifying lines and angles and classifying shapes by properties. <br> Limit the amount of required student practice. | enVisions Topic 16: Follow Instructional Framework (3 part lesson format) <br> enVision Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) <br> Prodigy <br>  <br> Y. Symmetry) <br> Fact Fluency Drills <br> Provide students with opportunities to explain their reasoning/ and with using visual models. | Parallelogram <br> Rectangle <br> Square <br> Rhombus <br> Trapezoid <br> Parallel lines <br> Perpendicular lines <br> Intersecting lines <br> Right triangles <br> Obtuse triangle <br> Acute triangle <br> Equilateral triangle <br> Isosceles triangle <br> Scalene triangle <br> Line of symmetric <br> Line of symmetry <br> *New words are in Bold | 4.G.A. 1 <br> 4.G.A. 2 <br> 4.G.A. 3 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |



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| 7 days | Topic 11: Represent and Interpret Data on Line Plots <br> - Read line plots <br> - Make line plots <br> - Use line plots to solve problems | enVisions Topic 11: Follow Instructional Framework (3 part lesson format) <br> enVisions Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) <br> Prodigy <br> IXL (J. Data and Graphs) <br> Fact Fluency Drills <br> Number LInes <br> Provide students with opportunities to explain their reasoning/ and with using visual models. | Line plot <br> Scale <br> *New words are in Bold | 4.MD.B. 4 <br> 4.NF.A. 1 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |


| 7 days | Topic 14: Algebra: Generate and Analyze Patterns <br> - Number sequences <br> - Patterns: Number Rules <br> - Patterns: Repeating Shapes <br> Eliminate lessons on generating and analyzing patterns. | enVisions Topic 14: Follow Instructional Framework (3 part lesson format) <br> enVision Digital Platform <br> Games (Quiet Tiles) \& enVision digital games <br> Boom Cards-Teachers Pay Teachers <br> Anchor Charts/Vocab. Word Wall <br> Reflex (Multiplication \& Division) <br> Prodigy <br> IXL (L. Patterns \& Sequences) <br> Fact Fluency Drills <br> Manipulatives Pattern Blocks <br> Provide students with opportunities to explain their reasoning/ and with using visual models. | Growing patterns <br> Rule <br> Repeating pattern <br> *New words are in Bold | 4.OA.C. 5 <br> MP. 1 <br> MP. 2 <br> MP. 3 <br> MP. 4 <br> MP. 5 <br> MP. 6 <br> MP. 7 <br> MP. 8 |
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- IXL
- Slates/Whiteboards
- Entrance/Exit Slip
- Quick Check
- Teacher Made Quiz
- Reteach Wkbk pgs.
- Additional Practice Problems
- Pick a Project
- Boom Cards
- Vocab Assessments
Main Resources $\quad$ Supplementary Resources
- enVisions 2020 Common Core Edition
- Common Assessments - Pre/Post
- Topic Assessments
- Topic Performance Based Assessments
- Benchmark Assessments on Multiple Chapters
- IXL
- Prodigy
- Reflex Math
- Boom Cards-Teachers Pay Teachers

