Math Pacing Guide **revised for 2021-22

| Grade 1/ Math / Trimester 1 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Time Frame | Primary Math Skills | Instructional Strategy | Academic Vocabulary | Standards \& Math Practice |
| First 2 weeks of school | Show students how to login and navigate Envision Online (Pearson Realize), IXL, and Prodigy <br> Show how to login and navigate Google Classroom to view math videos, follow links, and open assignments if working remotely or independently <br> Number sense-Also can be practiced during calendar <br> - Count by 1 s <br> - Count by 5 s to 50 <br> - Count by 10 s to 100 <br> - Count by 2 s to 20 <br> - Extend counting patterns <br> - One more, one less <br> - Review coin ID and values <br> - Review telling time <br> - Count groups pennies, groups of nickels and groups of dimes <br> - Count coin combinations P, N <br> - Review basic shapes | - Whole group review number grid, Reken Reks, Dot plates, number line, patterns <br> - Model how math workshop works <br> - Show and tell work <br> - Partner games <br> Give Readiness Test?? | More, less, greater, fewer, 10 frames, odd, even | $\begin{aligned} & \text { 1.NBT.A. } 1 \\ & \text { 1.MD.B. } 3 \end{aligned}$ |


| Mid <br> September- <br> Beginning of October | Topic 1- Understand Addition and Subtraction <br> - Represent and solve problems involving addition and subtraction <br> - Add and subtract within 20 <br> - Understand the meaning of the equal sign | - Manipulatives-, number line, counters, unifix cubes <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/Online Programs <br> - Pick a Project | - Add <br> - Parts <br> - Sum <br> - Equals <br> - Whole <br> - Equation <br> - Subtract <br> - Minus <br> - Difference <br> - More <br> - Compare <br> - Fewer <br> - Addend | $\begin{aligned} & \text { 1.OA.A.1, } \\ & \text { 1.OA.C. } 6 \\ & \text { 1,OA.D. } 7 \end{aligned}$ |
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| MidOctober | Topic 2 - Fluently Add and Subtract Within 10 <br> - Represent and solve problems involving addition and subtraction <br> - Fluently Add and subtract within 10 <br> - Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). <br> - Apply properties of operations as strategies to add and subtract.(Commutative Property of Addition) <br> - Understand subtraction as an unknown-addend problem. | - Manipulatives-, number line, counters, unifix cubes <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project | - Number line <br> - Doubles Facts <br> - Near doubles facts <br> - Count back | $\begin{aligned} & \text { 1.OA.A.1, } \\ & \text { 1.OA.B.3, } \\ & \text { 1.OA.C.5 } \\ & \text { 1.OA.C. } 6 \end{aligned}$ |
| November | Topic 3 Addition facts to 20: Use | - Manipulatives-, number | - Open | 1.OA.A. 1 |


| strategies <br> - Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions <br> - Apply properties of operations as strategies to add and subtract. <br> - Relate counting to addition and subtraction <br> - Add and subtract within 20, demonstrating fluency for addition and subtraction within 10 . Use strategies such as counting on; making ten; decomposing a number leading to a ten; and using the relationship between addition and subtraction. | line, counters, unifix cubes, ten frames <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | Number line <br> - Doubles plus facts <br> - Make 10 | $\begin{aligned} & \text { 1.OA.B. } 3 \\ & \text { 1.OA.C. } 5 \\ & \text { 1.OA.C. } 6 \end{aligned}$ |
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| Formative Assessment Plan | Summative Assessment Plan |
| :---: | :---: |
| - IXL diagnostic <br> - Observation in whole group <br> - Observation in math groups <br> - Slate work <br> - Math notebook/ problem solving <br> - Daily workbook practice <br> - Prodigy | - Topic Tests <br> - Pick a Project/3 ACTS <br> - End of trimester assessments <br> - Fact assessments <br> - MAP testing |


| Main Resources | Supplementary Resources |
| :---: | :---: |
| - Envision Topics 1-3 | - Number sense skill builders- RekenReks; Using number grid; math fact cards, math talks, dot cards, ten frames <br> - Games for addition/ subtraction- Top It; Addition Top It; Ladybug Doubles Game; Rolling to 100; Around the World ; Dominoes; Dice; Number Line <br> - Part, part, total wipe off mats; number bonds wipe off mat; <br> - Anchor charts- making 10; doubles facts <br> - Technology games- xtramath.org; IXL; Give a Dog a Bone, Fun 4 the Brain <br> - Ipad and Google Tablet apps - Math Slicer, Mummy Math, Squeebles, Sushi Monster, Math Blaster, Math Zombies, Math Museum, Amazing Coin, My Piggy Bank, Math Run, Goldfish Math <br> - STEAM- Building with cubes, cups and popsicle sticks <br> - Money games- Coin Exchange Game (Everyday Math); Coin Top It, coin puzzles; coin matching; money grab <br> - PMI-Money resources as needed <br> - Problem solving questions <br> - Math word wall |


| Grade 1 / Math / Trimester 2 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Time Frame | Primary Math Skills | Instructional Strategy | Academic Vocabulary | Standards \& Math Practice |
| December | Topic 4 Subtraction Facts to 20: Use strategies <br> - Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions <br> - Apply properties of operations as strategies to add and subtract. <br> - Relate counting to addition and subtraction <br> - Add and subtract within 20 , demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten; decomposing a number leading to a ten; and using the relationship between addition and subtraction. <br> Topic 13 Time and Money <br> - Tell time to the hour and half hour <br> - Tell the Value of Coins <br> - Find the Value of Coins | - Manipulatives-, number line, number grids, counters, unifix cubes, ten frames, coins, clocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Related Facts <br> - Fact Family <br> - Cent <br> - Dime <br> - Dollar <br> - Nickel <br> - Quarter <br> - Penny <br> - Hour <br> - Hour hand <br> - Minute <br> - Minute hand <br> - O'clock <br> - Half hour | 1.OA.A. 1 <br> 1.OA.B. 3 <br> 1.OA.C. 5 <br> 1.OA.C. 6 <br> 1.NBT.A. 1 <br> 1.NBT.B. 2 <br> 1.MD.B. 3 |


| January | Topic 5: Work with Addition and Subtraction Equations <br> - Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <br> - Add 3 digits <br> - Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. <br> - Add and subtract, within 20 , using properties of operations as strategies <br> - Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. | - Manipulatives-, number line, number grids, counters, unifix cubes, ten frames, coins, clocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Review vocab | $\begin{aligned} & \text { 1.OA.A.2, } \\ & \text { 1.OA.D.8 } \\ & \text { 1.OA.B.3, } \\ & \text { 1,OA.C.5, } \\ & \text { 1.OA.D.7 } \end{aligned}$ |
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| MidJanuary | Topic 6: Represent and Interpret Data <br> - Organize, represent, and interpret data with up to three categories <br> - Compare the number of data points among the categories <br> - Ask and answer questions about the total number of data points | - Manipulatives-, number line, number grids, counters, unifix cubes, ten frames, coins, clocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs | - Tally Marks <br> - Data <br> - Tally Chart <br> - Picture Graph <br> - Survey | 1.MD.C. 4 |


|  |  | - Pick a Project <br> - 3 Acts |  |  |
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| February- <br> Mid <br> February | Topic 7: Extent the Counting Sequence <br> - Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. <br> - Understand that the two digits of a two-digit number represent amounts of tens and ones. | - Manipulatives-, number line, number grids, counters, unifix cubes, pattern blocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Hundred Chart <br> - Tens digit <br> - Row <br> - Ones digit <br> Column | 1.NBT.B.2a,b,c, <br> 1.NBT.A. 1 |


| Formative Assessment Plan | Summative Assessment Plan |
| :---: | :---: |
| - IXL diagnostic <br> - Observation in whole group <br> - Slate work <br> - Observations in math groups <br> - Math Notebooks/ problem solving <br> - Daily workbook practice <br> - Prodigy | - Topic Tests <br> - Pick a Project/3 ACTS <br> - End of trimester assessments <br> - Fact assessments <br> - MAP testing |
| Main Resources | Supplementary Resources |
| Envisions Topic 4, 13, 5, 6, 7 | - Number sense skill builders- RekenReks; Using number grid; math fact cards, math talks, dot cards, ten frames |


|  | - Games- Place value top-it; Place Value- Base Ten Exchange; fact practice games <br> - Online games- Sheppard Software; xtramath.org; IXL. Starfall, ABCya <br> - Youtube- Jack Hartman songs <br> - Ipad and Google Tablet apps - Missing Numbers, Telling Time, TT Clock, Base Ten, Slate Math <br> - STEAM- Build using base ten blocks- estimate and count total value of blocks; <br> - Manipulatives- Base Ten Blocks/ place value mat; individual or class number grids to 100 <br> - 100th day of school activities/ STEAM- hopping, jumping, etc in 100 seconds, making a pyramid with 100 cups, fruit loop necklaces by tens to 100 <br> - Problem solving questions by teachers pay teachers |
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## Grade 1/ Math / Trimester 3

| Time | Primary Math Skills | Instructional Strategy | Academic |  |
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| Frame |  |  | Vocabulary | Math Practice |
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| Mid-FebBeginning of March | Topic 8 Understand Place Value <br> - Count to 120 , starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. <br> - Understand that the two digits of a two-digit number represent amounts of tens and ones. | - Manipulatives-, number line, number grids, counters, unifix cubes, place value blocks, ten frames <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Ones <br> - Subtract <br> - Tens <br> - Break apart | $\begin{aligned} & \text { 1.NBT.B.2a,b, } \\ & \text { c } \\ & \text { 1.NBT.A.1 } \end{aligned}$ |
| MidMarch | Topic 9 - Compare Two-Digit Numbers <br> - Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. <br> - Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. | - Manipulatives-, number line, number grids, counters, unifix cubes, ten frames, place value blocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Less <br> - Compare <br> - Greater <br> Than(>) <br> - Less Than (<) | 1.NBT.C. 5 <br> 1.NBT.B. 3 |


| End of March-Mid-April | Topic 10 - Use Models and Strategies to add Tens and Ones <br> - Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10 . <br> - Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. <br> - Understand that the two digits of a two-digit number represent amounts of tens and ones. | - Manipulatives-, number line, number grids, counters, unifix cubes, ten frames, coins, clocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Review Vocab | 1.NBT.C. 4 <br> 1.NBT.C. 5 <br> 1.NBT.B.2a, c |
| :---: | :---: | :---: | :---: | :---: |
| End-AprilMid May | Topic 11: Use Models and Strategies to Subtract Tens <br> - Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 <br> - Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. <br> - Understand that the two digits of a two-digit number represent amounts of tens and ones. | - Manipulatives-, number line, number grids, counters, unifix cubes,place value blocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Review Vocab | 1.NBT.C. 6 <br> 1.NBT.C. 5 <br> 1.NBT.B. 2 |


| Mid May | Topic 12: Measure Lengths <br> - Order three objects by length; compare the lengths of two objects indirectly by using a third object. <br> - Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. | - Manipulatives-String, Class Objects, Connecting Cubes, Paper Clips, i inch squares, straws <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Length <br> - Longer <br> - Longest <br> - Shorter <br> - Shortest <br> - Measure | $\begin{aligned} & \text { 1.MD.A. } 1 \\ & \text { 1.MD.A. } 2 \end{aligned}$ |
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| End of Maybeginning of June | Topic 14: Reason with Shapes and their Attributes <br> - Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes. <br> - Compose two-dimensional shapes or three-dimensional shapes to create a composite shape, and compose new shapes from the composite shape. | - Manipulatives-Measuring tools, same length objects, shapes, pattern blocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Triangle <br> - Hexagon <br> - 2-D shapes <br> - Attributes <br> - Sides <br> - Vertices <br> - Rectangle <br> - Square <br> - 3-D shapes <br> - Flat surfaces <br> - Cylinder <br> - Cone <br> - Cube <br> - Rectangular prism <br> - Edges <br> - Faces <br> - Sphere | $\begin{aligned} & \text { 1.G.A. } 1 \\ & \text { 1.G.A. } 2 \end{aligned}$ |


| Mid-June | Topic 15: Equal Shares of Circles and Rectangles <br> - Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. | - Manipulatives-Fraction blocks <br> - Math talks <br> - Solve and share <br> - Visual Learning <br> - Partner Games and practice <br> - Differentiated small groups <br> - Guided practice <br> - Independent practice/online programs <br> - Pick a Project <br> - 3 Acts | - Equal Shares <br> - Halves <br> - Fourths <br> - Quarters | 1.G.A. 3 |
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| Formative Assessment Plan | Summative Assessment Plan |
| :---: | :---: |
| - IXL diagnostic <br> - Observation in whole group <br> - Slate work <br> - Observations in math groups <br> - Math Notebooks/ problem solving <br> - Daily workbook practice <br> - Prodigy | - Topic Tests <br> - Pick a Project/3 ACTS <br> - End of trimester assessments <br> - Fact assessments <br> - MAP testing |
| Main Resources | Supplementary Resources |
| Envision Topics- 8, 9, 10, 11, 12, 14, 15 | - Number sense skill builders- RekenReks; Using number grid; math fact cards, math talks, dot cards, ten frames Games- Make My Design; Pattern Blocks and templates, |



- Online games- Sheppard Software; xtramath.org; IXL; Arcademics; Mathisfun.com- graph maker;
- Youtube- Jack Hartman songs
- Ipad and Google Tablet apps
- STEAM- Jellybean sorting and graphing, building 2D and 3D shapes using toothpicks
- Manipulatives- pattern blocks, 3D blocks
- Making shapes activities- using straws and play doh to build shapes, Foldable 3D shapes; folding shapes into equal parts

