3rd Grade Math Curriculum 2023

Pacing Guide	Standard Code & Indicator	Sample Learning Activities	Sample Assessments	Additional Standards
August-October	**3.NBT.1** Use place value understanding to round whole numbers to the nearest 10 or 100. **3.NBT.2** Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. **3.OA.8** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and	-Read, write, and identify the place value of whole numbers through thousands. -Use place value to compare numbers. -Use a number line and place value to order numbers through thousands. -Round numbers to the nearest ten & hundred. -Use the four step plan to solve problems. -Use addition properties to add whole numbers. -Use place value to identify addition patterns. -Estimate sums using rounding. -Use models to explore adding three-digit numbers	**Formative Assessments:** Chapter Pretest Place Value Quiz Turn & Talk Classwork/Homework **Summative Assessments:** Chapter Test **Benchmark Assessment:** BOY Benchmark LinkIt BOY Benchmark Accommodations and Modifications	**Interdisciplinary Standard:** RL3.1 Read. Place Value: The Next Stage by Claire Piddock **Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information and brainstorm to solve a problem.

	estimation strategies including rounding. **3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	-Add three-digit numbers (with and without regrouping) and use estimation to check for reasonableness. -Estimate differences using rounding to the nearest ten or hundred. -Determine whether an exact answer is needed to solve a problem. -Model subtraction with regrouping. -Subtract three & four digit numbers with regrouping and across zero. **Instructional Resources:** Big Ideas Textbook & Student Workbook **Teacher Technology:** Promethean Board/Activ Panel YouTube Videos ActiView Brain Pop My Math **Student Technology:** Study Island Google Classroom Chromebook/Ipads		

		STAR Fun4theBrain Xtra Math Prodigy Espark		
November-December	**3.OA.1** Interpret products of whole numbers,e.g.,interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. **3.OA.2** Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. **3.OA.3** Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a	-Use models to explore the meaning of multiplication. -Relate multiplication and addition. -Use arrays to model multiplication. -Use the make a table strategy to multiply. -Use multiplication to find the total number of combinations that can be made when given two groups of objects. -Model division as equal sharing. -Use models to relate division and subtraction. -Explore how division and multiplication are related. -Divide using related multiplication facts.	**Formative Assessments:** Chapter Pretest Multiplication Quiz Turn & Talk Classwork/Homework **Summative Assessments:** Chapter Test Accommodations and Modifications	**Interdisciplinary Standard:** **Visual and Performing Arts 1.5.5.Cr2a:** Finding patterns (multiplication) in nature, music and visual arts. **Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information and brainstorm to solve a problem.

	symbol for the unknown number to represent the problem. **3.OA.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers. **3.OA.5** Apply properties of operations as strategies to multiply and divide. **3.OA.6** Understand division as an unknown-factor problem. **3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that8 × 5 = 40, one knows 40 ÷ 5 =8)or properties of operations .By the end of Grade 3, know from memory all products of two one-digit numbers. **3.OA.8** Solve two-step word problems using the four operations. Represent	-Identify and explain patterns in the multiplication table. -Use arrays and drawings such as a bar diagrams, to multiply by two. -Use models and related multiplication facts to divide by 2. -Use different strategies, including patterns to multiply and divide by 1-12. -Use basic facts and patterns to multiply a number by a multiple of 10. -Use different strategies, such as arrays, equal groups, and properties, to multiply and divide by 2-4. -Explore how to double a known fact in order to multiply by 4. -Solve a problem by identifying extra or missing information. -Explore how to take apart factors to multiply. -Apply the Distributive Property to find products. -Explore how to find products of three factors.		

	these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. **3.OA.9** Identify arithmetic patterns(including patterns in the addition table or multiplication table), and explain them using properties of operations.	-Apply the Associative Property of Multiplication to find products. -Represent and solve two step word problems using equations with a variable. **Instructional Resources:** Big Ideas Textbook & Student Workbook **Teacher Technology:** Promethean Board/Activ Panel YouTube Videos ActiView Brain Pop My Math **Student Technology:** Study Island Google Classroom Chromebook/Ipads STAR Fun4theBrain Xtra Math Prodigy Espark		
January-February	**3NF.1** Understand a fraction 1/*b* as the quantityformedby1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*.	-Explore and model unit fractions. -Read and write fractions that name part of a whole.	**Formative Assessments:** Chapter Pretest Fractions Quiz Turn & Talk Classwork/Homework	**Interdisciplinary Standard: Health** 2.2.5.N.1: Food Energy and You. **Technology Standard**

	3NF.2 Understand fractions as a number on the number line; represent fractions on a number line diagram. **3NF.2.A** Represent a fraction 1/*b* on a number line diagram by defining the intervalfrom0 to1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size1/*b* and that the endpoint of the part basedat0 locates the number1/*b* on the number line. **3NF.2.B** Represent a fraction *a*/*b* on a number line diagram by marking off *a* lengths 1/*b* from.Recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line. **3NF.3** Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. **3NF.3.A** Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. **3NF.3.B** Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4,4/6 =2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	-Use models to represent fractions that name part of a whole. -Draw a diagram to solve problems. -Represent fractions on a number line. -Use models to find equivalent fractions. -Express whole numbers as fractions and recognize fractions equivalent to whole numbers. -Use models to compare two fractions and record the results. **Instructional Resources:** Big Ideas Textbook & Student Workbook **Teacher Technology:** Promethean Board/Activ Panel YouTube Videos ActiView Brain Pop My Math **Student Technology:** Study Island Google Classroom Chromebook/Ipads STAR Fun4theBrain Xtra Math	**Summative Assessment:** Chapter Test Accommodations and Modifications	8.2.5.ED.2: Collaborate with peers to collect information and brainstorm to solve a problem.

	3NF.3.C Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. **3NF.3.D** Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >,=,or<,and justify the conclusions, e.g., by using a visual fraction model. **3.G.2** Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. **3.OA.8** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Prodigy Espark		

	3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations			

March-April	**3.G.1** Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category(e.g., quadrilaterals).Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. **3.MD.5** Recognize area as an attribute of plane figures and understand concepts of area measurement. **3.MD.5.A** A square with side length1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area. **3.MD.5.B** A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units. **3.MD.6** Measure areas by counting unit squares (square cm, square m, square in, square ft. and non-standard units). **3.MD.7** Relate area to the operations of	-Explore finding the perimeter of a figure. -Find the unknown when solving problems involving perimeter. -Count unit squares to find the area of a figure. -Use addition or tiling to measure the area of a figure. -Use the formula for area to find the area of rectangles. -Use the Distributive Property to find area. -Find the area of composite figures. -Recognize the relationship between area and perimeter. -Draw a diagram to solve problems. -Explore angles of two dimensional figures. -Describe and classify polygons, triangles and quadrilaterals by their attributes. -Describe the shared attributes of quadrilaterals.	**Formative Assessments:** Chapter Pretest Area & Perimeter Quiz Turn & Talk Classwork/Homework **Summative Assessment:** Chapter Test Accommodations and Modifications	**Interdisciplinary Standard:** **Science 3-LS2-1**Animal Habitats: Determining the area and perimeter **Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information and brainstorm to solve a problem.

	multiplication and addition. **3.MD7A** Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. **3.MD.7.B** Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **3.MD.7.C** Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. **3.MD.7.D** Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	-Partition shapes into equal sections and write unit fractions to represent each area. **Instructional Resources:** Big Ideas Textbook & Student Workbook **Teacher Technology:** Promethean Board/Activ Panel YouTube Videos ActiView Brain Pop My Math **Student Technology:** Study Island Google Classroom Chromebook/Ipads STAR Fun4theBrain Xtra Math Prodigy Espark		

	3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeter. **3.OA.8** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. **3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations			
May-June	**3.MD.3** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one-and two-step "how many more" and	-Collect and record data through observations and surveys. -Draw a scaled picture & bar graph.	**Formative Assessments:** Chapter Pretest Graphing Quiz Turn & Talk	**Interdisciplinary Standard:**

	"how many less" problems using information presented in scaled bar graphs. **3.MD.4** Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters. **3.OA.8** Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. **3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. **3.MD.1** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word	-Relate bar graphs to scaled picture graphs. -Draw, organize, and analyze data in line plots. -Measure lengths to the nearest half inch and nearest quarter. -Collect and display measurement data to fractions of an inch. -Explore estimating and measuring liquid volume using metric units of capacity. -Use four operations to solve one step word problems involving liquid volume. -Explore estimating and measuring metric units of mass. -Use the four operations to solve one step word problems involving mass. -Tell time to the nearest minute. -Determine time intervals to solve problems. **Instructional Resources:** Big Ideas Textbook & Student Workbook	Classwork/Homework **Summative Assessment:** Chapter Test **Benchmark Assessment:** EOY Benchmark LinkIT BOY Benchmark Accommodations and Modifications	**Social Studies** **6.1.5.EconET.2:** Populations on the Rise Graph Analysis **Technology Standard:** 8.2.5.ED.2: Collaborate with peers to collect information and brainstorm to solve a problem.

	problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram. **3.MD.2** Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	**Teacher Technology:** Promethean Board/Activ Panel YouTube Videos ActiView Brain Pop My Math **Student Technology:** Study Island Google Classroom Chromebook/Ipads STAR Fun4theBrain Xtra Math Prodigy Espark		

Alternate Assessments: Pie Making Community Service Project & Explain what a budget is and Why it's important
21st Century Standards: 9.1.4.A.2, 9.1.4.B.5 & 9.1.4.B.3
21st Century Skills: Collaboration, Communication & Social Skills
Career Ready Practices : CRP5 & CRP1