Western Line SCHOOL DISTRICT

Mathematics, Grade 3

TERM 1	
Term 1 Dates	**MS College and Career Readiness Standards**
August 6 - 9 Week 1	**Back to school** *Addition and subtraction fluency
August 12 - 16 Week 2	**3.NBT.1** Use place value understanding to round whole numbers to the nearest 10 or 100. *Addition and subtraction fluency every day
August 19 - 23 Week 3	**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. (Focus on addition: Algorithm Monday- Wednesday, Word Problems Thursday -Friday) **3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (0s and 1s)*
August 26 - 30 Week 4	**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. (Focus on subtracting Algorithm Monday- Wednesday, Word Problems Thursday -Friday) **3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (2s)*

September 3 - 6 *Labor Day* Week 5	**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.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 "how many less" problems== using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets (Bar Graphs: reading and understanding) **3.OA.7** Fluently ==multiply== and ==divide== within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (5s)*
September 9 - 13 Week 6	**3.OA.8** Solve two-step word problems using ==addition & subtraction==. 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.7** Fluently ==multiply== and ==divide== within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (10s)*
September 16 - 20 Week 6	**3.NBT.3** Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations. **3.OA.7** Fluently ==multiply== and ==divide== within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (11s)*

September 23 - 27 Week 7	**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.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 (including, but not limited to: modeling, drawing, designing, and creating) rectangles with the same perimeter and different areas or with the same area and different perimeters. **3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (3s)*
Sept 30 - Oct. 4 Week 8	Spiral Review of all Standards to Prepare for BMA 1
October 7 - 11 Week 9	**Review and BMA 1**

TERM 2

Term 2 Dates	MS College and Career Readiness Standards
October 15 -18 *Fall Break* Week 1	**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.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 symbol for the unknown number to represent the problem. **3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (4s)*
October 22 - 25 *PT Conference* Week 2	**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 into 8 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 symbol for the unknown number to represent the problem. **3.OA.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (6s)*
October 29 - November 1 Week 3	**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 into 8 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 symbol for the unknown number to represent the problem. **3.OA.7** Fluently ==multiply== and ==divide== within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (7s)*
November 4 - 8 Week 4	**3.OA.5** Apply properties of operations as strategies to ==multiply== and ==divide==. Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.) **3.OA.7** Fluently ==multiply== and ==divide== within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (8s)*
November 11 - 15 Week 5	**3.OA.4** Determine the unknown whole number in a ==multiplication== or division equation relating three whole numbers. **3.OA.6** Understand division as an unknown-factor problem. **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 "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.

	3.OA.7 Fluently <mark>multiply</mark> and <mark>divide</mark> within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (9s)*
November 18 - 22 Week 6	**3.OA.8** Solve two-step word problems using <mark>multiplication & division</mark>. 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.7** Fluently <mark>multiply</mark> and <mark>divide</mark> within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week (12s)*
November 25 - 29 Week 7	**Thanksgiving Break**
December 2 - 6 Week 8	**3.OA.9** Identify arithmetic patterns (including patterns in the addition table or multiplication table) and explain them using properties of operations. **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. **3.OA.7** Fluently <mark>multiply</mark> and <mark>divide</mark> within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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. *Multiplication and division fluency five times a week*
December 9 -13 Week 9	**3.OA.7** Fluently <mark>multiply</mark> and <mark>divide</mark> within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 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.

| | Spiral Review Week

Multiplication and division fluency five times a week |
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| December 16 - 20
Week 9 | **Review and BMA 2** |

TERM 3

Term 3 Dates	MS College and Career Readiness Standards
January 6 - 10 Week 1	**3.NF.1** Understand a fraction $^1/_b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $^a/_b$ as the quantity formed by a parts of size $^1/_b$. **3.G.2** Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week*

January 13 - 17
Week 2
	3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram;
	
	   A. Represent a fraction $^1/_b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $^1/_b$ and that the endpoint of the part based at 0 locates the number $^1/_b$ on the number line;
	   B. Represent a fraction $^a/_b$ on a number line diagram by marking off a length $^1/_b$ from 0. Recognize that the resulting interval has size $^a/_b$ and that its endpoint locates the number $^a/_b$ on the number line.
	
	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.
	
	Addition and subtraction fluency twice a week
	Multiplication and division fluency three times a week

January 21 - 24
MLK Day
Week 3
	3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
	
	   A. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. Recognize that comparisons are valid only when the two fractions refer to the same whole.
	   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.
	
	Addition and subtraction fluency twice a week
	Multiplication and division fluency three times a week

January 27 - 30 Week 4	**3.NF.3 C**. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram

	Addition and subtraction fluency twice a week *Multiplication and division fluency three times a week*
February 3 -7 Week 5	**3.NF.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. *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week*

February 10 - 14
Week 6
	3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement:
	    A. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area;
	    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 improvised units).
	
	3.MD.7 Relate area to the operations of multiplication and addition:
	
	    A. 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;
	    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;
	
	Addition and subtraction fluency twice a week
	Multiplication and division fluency three times a week

February 18 - 21
President's Day
 	
Week 7
	3.MD.7 Relate area to the operations of multiplication and addition.
	
	    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 × b and a × c. Use area models to represent the distributive property in mathematical reasoning.
	    D. 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. Recognize area as additive.

	Addition and subtraction fluency twice a week *Multiplication and division fluency three times a week*
February 24 - 28 Week 8	**3.MD.1** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes. **Spiral Review for BMA** *Addition and subtraction fluency twice a week* *Multiplication and division fluency three times a week*
March 3 -7 Week 9	**Review and BMA 3**

TERM 4

Term 4 Dates	MS College and Career Readiness Standards
March 17 -21 Week 1	**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 into 8 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 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.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 that 8 × 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.
March 24 -28 Week 2	**3.OA.5** Apply properties of operations as strategies to multiply and divide. **3.OA.8** Solve two-step word problems using multiplication & division. 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.
March 31 - April 4 Week 3	**3.NF.1** Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.

	3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram;
	
	   C. Represent a fraction $1/_b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size $1/_b$ and that the endpoint of the part based at 0 locates the number $1/_b$ on the number line;
	   D. Represent a fraction $a/_b$ on a number line diagram by marking off a length $1/_b$ from 0. Recognize that the resulting interval has size $a/_b$ and that its endpoint locates the number $a/_b$ on the number line.
	
	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.

April 7 - 11
Week 4
	3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.
	
	   A. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. Recognize that comparisons are valid only when the two fractions refer to the same whole.
	
	   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.
	
	3.NF.3 C. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram
	
	3.NF.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

April 14 - 17 *Good Friday* Week 5	**3.G.1** Understand that shapes in different categories (e.g., rhombuses, rectangles, circles, 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.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape **3.MD.1** Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes.
April 21 - 25 *Easter Break* Week 6	**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 "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.
April 28 - May 2 Week 7	**MAAP Review All Standards**
May 5 - 9 Week 8	**End-of-Year Review**
May 12 - 16 Week 9	**BMA 4**
May 19 -23	**Last Week of School**