

3rd Grade Math Essential Standards and Learning Targets

Essential Standards				
<p>3_M_1 Students will understand, analyze, and extend the properties of the base-ten number system.</p>	<p>3_M_2 Students will identify and apply concepts of measurement and data.</p>	<p>3_M_3 Students will understand, analyze, solve problems, and explain patterns in multiplication and division.</p>	<p>3_M_4 Students will understand, recognize, and compare fractions (limited to fractions with denominators 2, 3, 4, 6, and 8).</p>	<p>3_M_5 Students will recognize, compare, analyze, and describe geometric shapes.</p>
Learning Targets				
<ul style="list-style-type: none"> ● 3_M_1_A: Write and solve two-step problems involving variables using any of the four operations. (MLS-3.RA.D.9) (CCSS-3.OA.8) ● 3_M_1_B: Interpret the reasonableness of answers using mental computation and estimation strategies including rounding. (MLS-3.RA.D.10) (CCSS-3.OA.8) ● 3_M_1_C: Read, write and identify whole numbers within 100,000 using base ten numerals, number names and expanded form. (MLS-3.NBT.A.2) ● 3_M_1_D: Round whole numbers to the nearest 10 or 100. (MLS-3.NBT.A.1) (CCSS-3.NBT.1) ● 3_M_1_E: Demonstrate fluency with addition within 1,000. (MLS-3.NBT.A.3) (CCSS-3.NBT.2) ● 3_M_1_F: Demonstrate fluency with subtraction within 1,000. (MLS-3.NBT.A.3) (CCSS-3.NBT.2) ● 3_M_1_G: Identify arithmetic patterns and explain the patterns using properties of operations. (MLS-3.RA.E.11) (CCSS-3.OA.9) 	<ul style="list-style-type: none"> ● 3_M_2_A: Tell and write time to the nearest minute. (MLS-3.GM.B.4) (CCSS-3.MD.1) ● 3_M_2_B: Estimate time intervals in minutes. (MLS-3.GM.B.5) (CCSS-3.MD.1) ● 3_M_2_C: Solve problems involving addition and subtraction of minutes. (MLS-3.GM.B.6) (CCSS-3.MD.1) ● 3_M_2_D: Measure or estimate liquid volume and weight of objects. (MLS-3.GM.B.7) (CCSS-3.MD.2) ● 3_M_2_E: Use the four operations to solve problems involving liquid volumes or weights given in the same units. (MLS-3.GM.B.8) (CCSS-3.MD.2) ● 3_M_2_F: Calculate area by using unit squares to cover a plane figure with no gaps or overlaps. (MLS-3.GM.C.9) (CCSS-3.MD.5) ● 3_M_2_G: Demonstrate that tiling a rectangle to find the area and multiplying the side lengths result in the same value. (MLS-3.GM.C.11) (CCSS-3.MD.7a) ● 3_M_2_H: Multiply whole-number side lengths to solve problems involving the area of rectangles. (MLS-3.GM.C.12) (CCSS-3.MD.7b) ● 3_M_2_I: Label area measurements with squared units. (MLS-3.GM.C.10) (CCSS-3.MD.6) ● 3_M_2_J: Find rectangular arrangements that can be formed for a given area. (MLS-3.GM.C.13) (CCSS-3.MD.7c) ● 3_M_2_K: Decompose a rectangle into smaller rectangles to find the area of the original rectangle. (MLS-3.GM.C.14) (CCSS-3.MD.7d) ● 3_M_2_L: Create frequency tables, scaled picture graphs, and bar graphs to represent a data set with several categories. (MLS-3.DS.A.1) (CCSS-3.MD.3) ● 3_M_2_M: Solve one- and two-step problems using information presented in bar and/or picture graphs. (MLS-3.DS.A.2) (CCSS-3.MD.3) ● 3_M_2_N: Create a line plot to represent data. (MLS-3.DS.A.3) (CCSS-3.MD.4) ● 3_M_2_O: Use data shown in a line plot to answer questions. (MLS-3.DS.A.4) (CCSS-3.MD.4) ● 3_M_2_P: Solve problems involving perimeters of polygons. (MLS-3.GM.D.15) (CCSS-3.MD.8) ● 3_M_2_Q: Measure or estimate length. (MLS-3.GM.B.7) (CCSS-3.MD.2) ● 3_M_2_R: Use the four operations to solve problems involving lengths. (MLS-3.GM.B.8) (CCSS-3.MD.2) ● 3_M_2_S: Understand that rectangles can have equal perimeters but different areas, or rectangles can have equal areas but different perimeters. (MLS-3.GM.D.16) (CCSS-3.MD.8) 	<ul style="list-style-type: none"> ● 3_M_3_A: Interpret products of whole numbers. (MLS-3.RA.A.1) (CCSS-3.OA.1) ● 3_M_3_B: Describe in words or drawings a problem that illustrates a multiplication situation. (MLS-3.RA.A.3) (CCSS-3.OA.1) ● 3_M_3_C: Interpret quotients of whole numbers. (MLS-3.RA.A.2) (CCSS-3.OA.2) ● 3_M_3_D: Describe in words or drawings a problem that illustrates a division situation. (MLS-3.RA.A.3) (CCSS-3.OA.1) ● 3_M_3_E: Apply properties of operations as strategies to multiply and divide. (MLS-3.RA.B.6) (CCSS-3.OA.5) ● 3_M_3_F: Determine the unknown number in a multiplication or division equation relating three whole numbers. (MLS-3.RA.A.5) (CCSS-3.OA.4) ● 3_M_3_G: Multiply and divide with numbers and results within 100 using strategies such as the relationship between multiplication and division or properties of operations. (MLS-3.RA.C.7) (CCSS-3.OA.7) ● 3_M_3_H: Use multiplication and division within 100 to solve problems. (MLS-3.RA.A.4) (CCSS-3.OA.3) ● 3_M_3_I: Demonstrate fluency with products within 100. (MLS-3.RA.C.8) (CCSS-3.OA.7) ● 3_M_3_J: Multiply whole numbers by multiples of 10 in the range 10-90. (MLS-3.NBT.A.4) (CCSS-3.NBT.3) 	<ul style="list-style-type: none"> ● 3_M_4_A: Partition shapes into parts with equal areas, and express the area of each part as a unit fraction of the whole. (MLS-3.GM.A.3) (CCSS-3.G.2) ● 3_M_4_B: Understand a unit fraction as the quantity formed by one part when a whole is partitioned into equal parts. (MLS-3.NF.A.1) (CCSS-3.NF.1) ● 3_M_4_C: Understand that when a whole is partitioned equally, a fraction can be used to represent a portion of the whole. (MLS-3.NF.A.2) (CCSS-3.NF.1) <ul style="list-style-type: none"> a. Describe the numerator as representing the number of pieces being considered. b. Describe the denominator as the number of pieces that make the whole. ● 3_M_4_D: Compare two fractions with the same numerator or denominator using the symbols $>$, $=$ or $<$, and justify the solution. (MLS-3.NF.A.6) (CCSS-3.NF.3d) ● 3_M_4_E: Represent fractions on a number line. (MLS-3.NF.A.3) (CCSS-3.NF.2a/b) <ul style="list-style-type: none"> a. Understand the whole is the interval from 0 to 1. b. Understand the whole is partitioned into equal parts. c. Understand a fraction represents the endpoint of the length a given number of partitions from 0. ● 3_M_4_F: Demonstrate that two fractions are equivalent if they are the same size, or the same point on a number line. (MLS-3.NF.A.4) (CCSS-3.NF.3a/b) ● 3_M_4_G: Recognize and generate equivalent fractions using visual models, and justify why the fractions are equivalent. (MLS-3.NF.A.5) (CCSS-3.NF.3a/b) ● 3_M_4_H: Explain why fraction comparisons are only valid when the two fractions refer to the same whole. (MLS-3.NF.A.7) (CCSS-3.NF.3d) 	<ul style="list-style-type: none"> ● 3_M_5_A: Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category. (MLS-3.GM.A.1) (CCSS-3.G.1) ● 3_M_5_B: Distinguish rhombuses and rectangles as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to these subcategories. (S-3.GM.A.2) (CCSS-3.G.1)