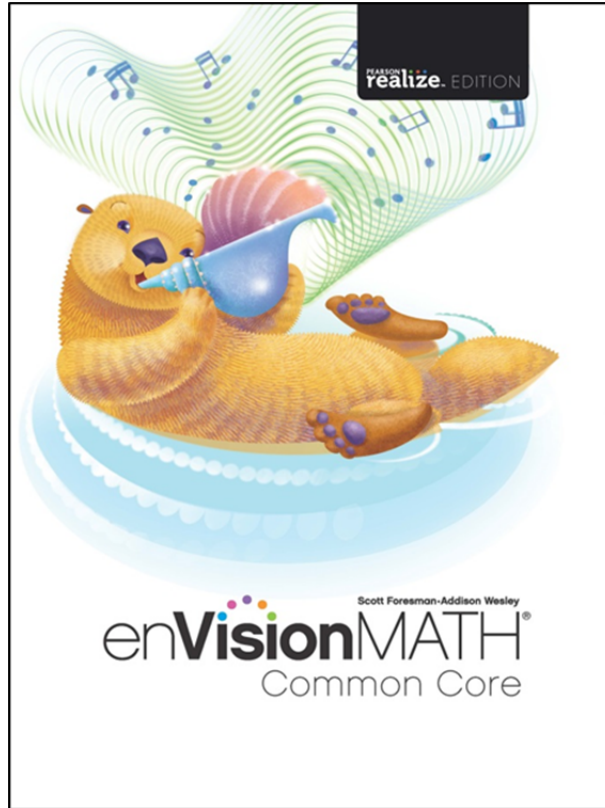


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to the

# Manchester Public Schools Mathematics Curriculum

## Grade 3

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**A Correlation of *enVisionMATH* Common Core, ©2015  
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<p align="center"><b>MPS Mathematics Units Grade 3 Overview</b></p>	<p align="center"><b>enVisionMATH Common Core, ©2015 Lessons</b></p>
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<b>MPS Mathematics Units Grade 3 Overview</b>	<b>enVisionMATH Common Core, ©2015 Lessons</b>
<b>Unit 5</b> Reasoning about 2-D Shapes	<b>Lesson 9-1:</b> Dividing Regions into Equal Parts <b>Lesson 11-1:</b> Polygons <b>Lesson 11-2:</b> Quadrilaterals <b>Lesson 11-3:</b> Classifying Shapes <b>Lesson 11-4:</b> Problem Solving: Make and Test Generalizations <b>Lesson 14-10:</b> Equal Areas and Fractions

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<b>Manchester Public Schools Mathematics Curriculum Grade 3 Correlation</b>	<b>enVisionMATH Common Core ©2015</b>
<b>Unit 1 Fact Strategies and Place Value to 1,000</b>	
[3.NBT.A.1] Use place value understanding to round whole numbers to the nearest 10 or 100.	<b>SE/TE: Topic 1:</b> 6-7, 8-9, 10-11, 12-13, 14-17, 18-19, 20-21, 22-23; <b>Topic 2:</b> 40-43, 44-47; <b>Topic 3:</b> 64-65, 74-77 <b>TE: Topic 1:</b> 6A-7B, 8A-9B, 10A-11B, 12A-13B, 14A-17B, 18A-19B, 20A-21B; <b>Topic 2:</b> 40A-43B, 44A-47B; <b>Topic 3:</b> 64A-65B, 74A-77B
[3.NBT.A.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.	<b>SE/TE: Topic 1:</b> 6-7; <b>Topic 2:</b> 30-31, 32-33, 34-37, 38-39, 40-43, 44-47, 48-49, 50-51; <b>Topic 3:</b> 58-59, 60-63, 64-65, 66-67, 68-69, 70-71, 72-73, 74-77, 78-79, 80-81, 82-83, 84-85, 86-89, 90-91 <b>TE: Topic 1:</b> 6A-7B; <b>Topic 2:</b> 30A-31B, 32A-33B, 34A-37B, 38A-39B, 40A-43B, 44A-47B, 48A-49B; <b>Topic 3:</b> 58A-59B, 60A-63B, 64A-65B, 66A-67B, 68A-69B, 70A-71B, 72A-73B, 74A-77B, 78A-79B, 80A-81B, 82A-83B, 84A-85B, 86A-89B
[3.OA.D.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.	<b>SE/TE: Topic 2:</b> 48-49, 50-51; <b>Topic 5:</b> 130-131, 132-133; <b>Topic 6:</b> 152-153, 158-161, 162-163; <b>Topic 8:</b> 200-201, 212-213 <b>TE: Topic 2:</b> 48A-49B; <b>Topic 5:</b> 130A-131B; <b>Topic 6:</b> 152A-153B, 158A-161B; <b>Topic 8:</b> 200A-201B
<b>Unit 2 Multiplication and Division</b>	
[3.OA.B.5] Apply properties of operations as strategies to multiply and divide.	<b>SE/TE: Topic 4:</b> 98-99, 100-101, 102-103, 104-105, 106-107, 108-109; <b>Topic 5:</b> 122-123; <b>Topic 6:</b> 140-141, 144-145, 152-153, 162-163; <b>Topic 8:</b> 204-205 <b>TE: Topic 4:</b> 98A-99B, 100A-101B, 102A-103B, 104A-105B, 106A-107B; <b>Topic 5:</b> 122A-123B; <b>Topic 6:</b> 140A-141B, 144A-145B, 152A-153B; <b>Topic 8:</b> 204A-205B
[3.MD.C.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.	<b>SE/TE: Topic 14:</b> 336-337, 338-339, 346-347, 348-349, 356-357 <b>TE: Topic 14:</b> 336A-337B, 338A-339B, 346A-347B, 348A-349B
[3.OA.A.1] Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each.	<b>SE/TE: Topic 4:</b> 98-99, 100-101, 102-103, 104-105, 106-107, 108-109 <b>TE: Topic 4:</b> 98A-99B, 100A-101B, 102A-103B, 104A-105B, 106A-107B

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[3.OA.A.2] Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ 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.	<b>SE/TE: Topic 7:</b> 170-171, 172-173, 182-183 <b>TE: Topic 7:</b> 170A-171B, 172A-173B
[3.NBT.A.3] Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., $9 \times 80$ , $5 \times 60$ ) using strategies based on place value and properties of operations.	<b>SE/TE: Topic 5:</b> 126-127, 128-129, 132-133 <b>TE: Topic 5:</b> 126A-127B, 128A-129B
[3.OA.C.7] Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	<b>SE/TE: Topic 5:</b> 116-119, 120-121, 122-123, 124-125, 126-127; <b>Topic 8:</b> 190-191, 192-195, 196-197, 198-199, 204-205, 206-207, 208-211, 212-213; <b>Topic 10:</b> 260-261 <b>TE: Topic 5:</b> 116A-119B, 120A-121B, 122A-123B, 124A-125B, 126A-127B; <b>Topic 8:</b> 190A-191B, 192A-195B, 196A-197B, 198A-199B, 204A-205B, 206A-207B, 208A-211B; <b>Topic 10:</b> 260A-261B
[3.OA.D.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.	<b>SE/TE: Topic 2:</b> 48-49, 50-51; <b>Topic 5:</b> 130-131, 132-133; <b>Topic 6:</b> 152-153, 158-161, 162-163; <b>Topic 8:</b> 200-201, 212-213 <b>TE: Topic 2:</b> 48A-49B; <b>Topic 5:</b> 130A-131B; <b>Topic 6:</b> 152A-153B, 158A-161B; <b>Topic 8:</b> 200A-201B



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[3.OA.A.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.	<b>SE/TE: Topic 4:</b> 98-99, 100-101, 102-103, 104-105, 106-107, 108-109; <b>Topic 5:</b> 116-119, 120-121, 122-123, 124-125, 126-127, 130-131; <b>Topic 6:</b> 140-141, 142-143, 144-145, 146-149, 150-151, 152-153, 154-155, 156-157, 158-161, 162-163; <b>Topic 7:</b> 170-171, 172-173, 176-177, 178-179, 180-181, 182-183; <b>Topic 8:</b> 190-191, 192-195, 196-197, 198-199, 200-201, 202-203, 204-205, 206-207, 208-211, 212-213; <b>Topic 14:</b> 336-337 <b>TE: Topic 4:</b> 98A-99B, 100A-101B, 102A-103B, 104A-105B, 106A-107B; <b>Topic 5:</b> 116A-119B, 120A-121B, 122A-123B, 124A-125B, 126A-127B, 130A-131B; <b>Topic 6:</b> 140A-141B, 142A-143B, 144A-145B, 146A-149B, 150A-151B, 152A-153B, 154A-155B, 156A-157B, 158A-161B; <b>Topic 7:</b> 170A-171B, 172A-173B, 176A-177B, 178A-179B, 180A-181B; <b>Topic 8:</b> 190A-191B, 192A-195B, 196A-197B, 198A-199B, 200A-201B, 202A-203B, 204A-205B, 206A-207B, 208A-211B, 212A-213B; <b>Topic 14:</b> 336A-337B
[3.OA.B.6] Understand division as an unknown-factor problem.	<b>SE/TE: Topic 7:</b> 174-175, 176-177, 180-181, 182-183; <b>Topic 8:</b> 190-191, 206-207, 212-213 <b>TE: Topic 7:</b> 174A-175B, 176A-177B, 180A-181B; <b>Topic 8:</b> 190A-191B, 206A-207B
[3.OA.A.4] Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	<b>SE/TE: Topic 7:</b> 170-171, 172-173, 174-175, 176-177, 178-179, 180-181, 182-183; <b>Topic 8:</b> 190-191, 192-195, 200-201, 202-203, 204-205, 206-207 <b>TE: Topic 7:</b> 170A-171B, 172A-173B, 174A-175B, 176A-177B, 178A-179B, 180A-181B; <b>Topic 8:</b> 190A-191B, 192A-195B, 200A-201B, 202A-203B, 204A-205B
[3.OA.D.9] Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	<b>SE/TE: Topic 2:</b> 30-31; <b>Topic 4:</b> 106-107, 108-109; <b>Topic 5:</b> 116-119, 120-121, 122-123, 124-125, 126-127, 132-133; <b>Topic 7:</b> 174-175 <b>TE: Topic 2:</b> 30A-31B; <b>Topic 4:</b> 106A-107B; <b>Topic 5:</b> 116A-119B, 120A-121B, 122A-123B, 124A-125B, 126A-127B; <b>Topic 7:</b> 174A-175B

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<b>Unit 3 Understanding and Reasoning with Fractions</b>	
[3.NF.A.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 $\frac{1}{b}$ .	<b>SE/TE: Topic 9:</b> 220-221, 222-223, 224-225, 226-227, 234-235, 236-237 <b>TE: Topic 9:</b> 220A-221B, 222A-223B, 224A-225B, 226A-227B, 234A-235B
[3.NF.A.2] Understand a fraction as a number on the number line; represent fractions on a number line diagram.	<b>SE/TE: Topic 9:</b> 228-229, 230-237; <b>Topic 10:</b> 260-261 <b>TE: Topic 9:</b> 228A-229B, 230A-231B; <b>Topic 10:</b> 260A-261B
[3.NF.A.3] Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	<b>SE/TE: Topic 9:</b> 228-229; <b>Topic 10:</b> 244-245, 246-247, 248-249, 250-251, 252-255, 256-257, 258-259 <b>TE: Topic 9:</b> 228A-229B; <b>Topic 10:</b> 244A-245B, 246A-247B, 248A-249B, 250A-251B, 252A-255B, 256A-257B, 258A-259B
[3.G.A.2] Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	<b>SE/TE: Topic 9:</b> 220-221; <b>Topic 14:</b> 350-351, 356-357 <b>TE: Topic 9:</b> 220A-221B; <b>Topic 14:</b> 350A-351B
<b>Unit 4 Exploring Measurement and Data</b>	
[3.MD.A.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, e.g., by representing the problem on a number line diagram.	<b>SE/TE: Topic 12:</b> 292-295, 296-297, 298-299, 300-301, 302-303 <b>TE: Topic 12:</b> 292A-295B, 296A-297B, 298A-299B, 300A-301B
[3.MD.A.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.	<b>SE/TE: Topic 15:</b> 364-365, 366-367, 370-371, 372-373, 374-375 <b>TE: Topic 15:</b> 364A-365B, 366A-367B, 370A-371B, 372A-373B
[3.MD.B.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.	<b>SE/TE: Topic 16:</b> 386-389, 390-391, 392-393, 394-395, 396-397 <b>TE: Topic 16:</b> 386A-389B, 390A-391B, 392A-393B, 394A-395B

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[3.MD.D.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 perimeters.	<b>SE/TE: Topic 13:</b> 310-311, 312-313, 314-315, 316-317, 318-321, 322-323; <b>Topic 14:</b> 346-347, 348-349, 356-357; <b>Topic 15:</b> 368-369 <b>TE: Topic 13:</b> 310A-311B, 312A-313B, 314A-315B, 316A-317B, 318A-321B; <b>Topic 14:</b> 346A-347B, 348A-349B; <b>Topic 15:</b> 368A-369B
<b>Unit 5 Reasoning about 2-D Shapes</b>	
[3.G.A.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.	<b>SE/TE: Topic 11:</b> 272-275, 276-277, 278-279, 280-281, 284-285 <b>TE: Topic 11:</b> 272A-275B, 276A-277B, 278A-279B, 280A-281B
[3.G.A.2] Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	<b>SE/TE: Topic 9:</b> 220-221; <b>Topic 14:</b> 350-351, 356-357 <b>TE: Topic 9:</b> 220A-221B; <b>Topic 14:</b> 350A-351B