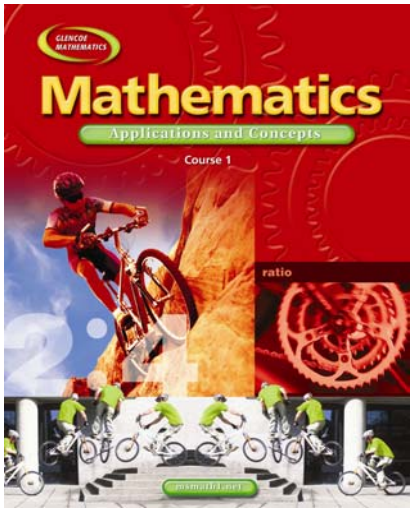
Mc Graw Hill Glencoe

Mathematics
Curriculum Framework
Grades 5-6

Massachusetts



Mathematics

Applications and Concepts
Course 1
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	STANDARDS	PAGE REFERENCES
	Grade 5 Standards	
	Number Sense and Operations Strand *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
5.N.1	Demonstrate an understanding of (positive integer) powers of ten, e.g., 10^2, 10^5.	**Student Edition:** 20 #17-#18, #22, 21 #45-#47, 31 #57 *Extra Practice* 595 Lesson 1-4 #4
5.N.2	Demonstrate an understanding of place value through millions and thousandths.	**Student Edition:** 102-103, 105 #42-#43, #46-#48, 111, 113 #11-#22, 586 *Hands-On Lab* 107 *The Game Zone* 115 *Prerequisite Skills* 586 **Teacher Wraparound Edition:** A 105, 110; DI 103; IE 103, 112
5.N.3	Represent and compare large (millions) and small (thousandths) positive numbers in various forms, such as expanded notation without exponents, e.g., 9724 = 9 x 1000 + 7 x 100 + 2 x 10 + 4.	**Student Edition:** 103, 104 #10-#40, 108-110 *Prerequisite Skills* 586 Example 2-Example 3, 587 **Teacher Wraparound Edition:** A 110; DI 108; IE 103 #2, 109; PA 104

Codes used for Teacher Wraparound Edition pages are the initial caps of headings on that page.

STANDARDS		PAGE REFERENCES
5.N.4	Demonstrate an understanding of fractions as a ratio of whole numbers, as parts of unit wholes, as parts of a collection, and as locations on the number line. *This standard is intentionally the same as standard 6.N.4.*	**Student Edition:** 182-185, 186-189, 198-199, 202-203, 400-403, 404 *Hands-On Lab* 181, 218, 234, 259, 270-271 *When* 206 *Concept Summary* 207 **Teacher Wraparound Edition:** B 182; IE 183, 187, 207, 401
5.N.5	Identify and determine common equivalent fractions (with denominators 2, 4, 5, 10) and mixed numbers (with denominators 2, 4, 5, 10), decimals, and percents (through one hundred percent), e.g., 3/4 = 0.75 = 75%.	**Student Edition:** 183, 184 #4-#6, #9, #11, #14, #16, #18, #22, #24, #29, #31-#32, 187 Example 2-Example 3, 188 #1, #5, #7, #10, #12-#13, #16, #19-#20, #23-#24, 395-397 *When* 182 **Teacher Wraparound Edition:** B 186, 395; DI 395; IE 183 #2, 187 #2-#3, 396
5.N.6	Find and position whole numbers, positive fractions, positive mixed numbers, and positive decimals on a number line.	**Student Edition:** 105 #54-#59, 108 Example 1, 109 #1, 111 Example 1-Example 2, 112 #1, 186, 295 Example 3d, 296 #7, #9-#18, 297 #23-#26, 429 **Teacher Wraparound Edition:** B 111
5.N.7	Compare and order whole numbers, positive fractions, positive mixed numbers, positive decimals, and percents.	**Student Edition:** 108-110, 119 #42, 198-201, 205 #37-#40, 209 #50, 406 #35-#36 *Prerequisite Skills* 588 **Teacher Wraparound Edition:** A 110; B108; DI 108, 199; IE 109, 199
5.N.8	Apply the number theory concepts of common factor, common multiple, and divisibility rules for 2, 3, 5, and 10 to the solution of problems. Demonstrate an understanding of the concepts of prime and composite numbers.	**Student Edition:** 10, 11 Example 1-Example 2, 12 #1-#13, 13 #40, 14-17, 21 #50-#53, 198 *The Game Zone* 23 **Teacher Wraparound Edition:** A 13, 17; B 10; DI 15; IE 11 #1-#2, 15
5.N.9	Solve problems involving multiplication and division of whole numbers, and multiplication of positive fractions with whole numbers.	**Student Edition:** 24-26, 29-31, 135-138, 143 #36-#39, 310-313, 350-353 *Getting Started* 133 #6-#11 *Hands-On Lab* 134 *Prerequisite Skills* 590 **Teacher Wraparound Edition:** B 135; DI 136; IE 136

STANDARDS		PAGE REFERENCES
5.N.10	Demonstrate an understanding of how parentheses affect expressions involving addition, subtraction, and multiplication, and use that understanding to solve problems, e.g., 3 x (4 + 2) = 3 x 6.	**Student Edition:** 24 Example 3, 25 Example 5, 26 #5-#8, #10-#11, #18-#23, #28-#31 *Notables* 24 **Teacher Wraparound Edition:** A 27; IE 25 #2-#3, #5
5.N.11	Demonstrate an understanding of the inverse relationship of addition and subtraction, and use that understanding to simplify computation and solve problems. *This standard is intentionally the same as standard 6.N.12.*	**Student Edition:** 339-342, 344-347, 353 #54-#61, 357 #29 *Hands-On Lab* 343, 354 **Teacher Wraparound Edition:** B 344; DI 340, 345; IE 340, 345
5.N.12	Accurately and efficiently add and subtract whole numbers and positive decimals. Multiply and divide (using double-digit divisors) whole numbers. Multiply positive decimals with whole numbers.	**Student Edition:** 24-26, 29-31, 121-124, 135-138, 143 #36-#39, 310-313, 350-353 *Getting Started* 133 #6-#11 *Hands-On Lab* 134 *Prerequisite Skills* 590, 598 **Teacher Wraparound Edition:** B 135; DI 136; IE 122, 136
5.N.13	Accurately and efficiently add and subtract positive fractions and mixed numbers with like denominators and with unlike denominators (2, 4, 5, 10 only); multiply positive fractions with whole numbers. Simplify fractions in cases when both the numerator and the denominator have 2, 3, 4, 5, or 10 as a common factor.	**Student Edition:** 182, 183 Example 3, 184 #10, #14-#15, #30, 228-231, 235-237, 239-240, 244-247 *The Game Zone* 233 *Hands-On Lab* 234 *Study Skill* 239 **Teacher Wraparound Edition:** IE229, 236, 245
5.N.14	Estimate sums and differences of whole numbers, positive fractions, and positive decimals. Estimate products of whole numbers and products of positive decimals with whole numbers. Use a variety of strategies and judge the reasonableness of the answer.	**Student Edition:** 116-119, 121-122, 124 #44-#47, 262 Example 2-Example 3, 415-417 *Prerequisite Skills* 592-593 **Teacher Wraparound Edition:** A 119, 417; DI 116, 415; IE 117, 416

	STANDARDS	PAGE REFERENCES
	Patterns, Relations, and Algebra Strand *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
5.P.1	Analyze and determine the rules for extending symbolic, arithmetic, and geometric patterns and progressions, e.g., ABBCCC; 1, 5, 9, 13…; 3, 9, 27... *This standard is intentionally the same as standard 6.P.1.*	**Student Edition:** 282-284, 298 #63-#65, 303 #49 *Problem-Solving Strategy* 280-281 *Study Guide and Review* 286 7-6 **Teacher Wraparound Edition:** A 281, 284; B 280, 282; DI 280, 282; IE 280, 283
5.P.2	Replace variables with given values and evaluate/simplify, e.g., 2(❍) + 3 when ❍ = 4. *This standard is intentionally the same as standard 6.P.2.*	**Student Edition:** 29-31, 35 Example 1, 36 #11-#20, 37 #46-#48 *Problem-Solving Strategy* 32-33 *Study Guide and Review* 44 1-6 **Teacher Wraparound Edition:** A 31; IE 29, 32
5.P.3	Use the properties of equality to solve problems with whole numbers, e.g., if □ + 7 = 13, then □ = 13 – 7, therefore □ = 6 ; if 3 x □ = 15, then □ = 15 ÷ 3, therefore □ = 5.	**Student Edition:** 340, 341 #1-#23, 342, 345, 346 #1-#27, 347 *Hands-On Lab* 343 **Teacher Wraparound Edition:** A 342, 347; DI 340; IE 340, 345
5.P.4	Represent real situations and mathematical relationships with concrete models, tables, graphs, and rules in words and with symbols, e.g., input-output tables. *This standard is intentionally the same as standard 6.P.4.*	**Student Edition:** 362-365, 366-369 *Hands-On Lab* 337, 343, 360-361 **Teacher Wraparound Edition:** B 366; DI 363, 366; IE 363, 367
5.P.5	Solve problems involving proportional relationships using concrete models, tables, graphs, and paper-pencil methods.	**Student Edition:** 286-289, 393 #10-#14 *Study Skills* 38 #2 *Spreadsheet Investigation* 390 *Hands-On Lab* 394 **Teacher Wraparound Edition:** A 393; B 387; DI 387; IE 387
5.P.6	Interpret graphs that represent the relationship between two variables in everyday situations.	**Student Edition:** 322 Example 4-Example 5, #14, 323 #37, 366-367 Example 1, 368 #18, 369 #20-#21 *When* 366 **Teacher Wraparound Edition:** IE 322

	STANDARDS	PAGE REFERENCES
	Geometry Strand *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
5.G.1	Identify, describe, and compare special types of triangles (isosceles, equilateral, right) and quadrilaterals (square, rectangle, parallelogram, rhombus, trapezoid), e.g., recognize that all equilateral triangles are isosceles, but not all isosceles triangles are equilateral.	**Student Edition:** 322 Example 4-Example 5, #14, 323 #37, 366-367 Example 1, 368 #18, 369 #20-#21 *When* 366 **Teacher Wraparound Edition:** IE 322
5.G.2	Identify, describe, and compare special types of three-dimensional shapes (cubes, prisms, spheres, pyramids) based on their properties, such as edges and faces.	**Student Edition:** 564-566, 575 *Hands-On Lab* 567, 574 *Extending the Lesson* 578 *Study Guide and Review* 580 14-4 **Teacher Wraparound Edition:** B 564, 570; DI 564; IE 565
5.G.3	Identify relationships among points and lines, e.g., intersecting, parallel, perpendicular.	**Student Edition:** 321, 322 #2-#14, 515, 516 #2-#3, 517 #5-#6, #9, #11-#14, #18, 523 *Hands-On Lab* 513-514 **Teacher Wraparound Edition:** IE 321, 516 #1
5.G.4	Using ordered pairs of whole numbers (including zero), graph, locate, and identify points, and describe paths on the Cartesian coordinate plane.	**Student Edition:** 320-323 *Study Guide and Review* 326 *Standardized Test Practice* 329 Part 3 **Teacher Wraparound Edition:** A 323; B 320; DI 321; IE 321-322
5.G.5	Describe and perform transformations on two-dimensional shapes, e.g., translations, rotations, and reflections.	**Student Edition:** 529 Example 5-Example 6, 530 #7-#9, 531 #18-#24, #26 *Hands-On Lab* 532-533, 537 **Teacher Wraparound Edition:** IE 529 #5-#6; TT 528
5.G.6	Identify and describe line symmetry in two-dimensional shapes, including shapes that have multiple lines of symmetry.	**Student Edition:** 528-531 *Getting Started* 505 #3-#4 *Study Guide and Review* 540 13-5 **Teacher Wraparound Edition:** A 531; B 528; DI 529; IE 529

STANDARDS		PAGE REFERENCES
5.G.7	Determine if two triangles or two quadrilaterals are congruent by measuring sides or a combination of sides and angles, as necessary; or by motions or series of motions, e.g., translations, rotations, and reflections.	**Student Edition:** 534-536 *Study Guide and Review* 540 *Practice Test* 541 #15 **Teacher Wraparound Edition:** DI 534; IE 535
	Measurement Strand *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
5.M.1	Apply the concepts of perimeter and area to the solution of problems involving triangles and rectangles. Apply formulas where appropriate.	**Student Edition:** 39-41, 158-160, 257 Example 4, 551-554 *Hands-On Lab* 464, 550, 555 *Spreadsheet Investigation* 469 **Teacher Wraparound Edition:** A 41; B 39, 158; DI 40, 158; IE 40, 159, 257 #4
5.M.2	Identify, measure, describe, classify, and draw various angles. Draw triangles given two sides and the angle between them, or given two angles and the side between them, e.g., draw a triangle with one right angle and two sides congruent.	**Student Edition:** 506-509, 510-512, 523 *Hands-On Lab* 513-514, 526-527 **Teacher Wraparound Edition:** A 509, 512; B 506, 510; DI 507, 510; IE 507, 510
5.M.3	Solve problems involving simple unit conversions within a system of measurement.	**Student Edition:** 465 Example 1, 466 Example 2, 467 #1, #3-#5, #10, #12-#17, 468 #28-#29, #36, 471-473 *Hands-On Mini Lab* 470 *Hands-On Lab* 474-475 **Teacher Wraparound Edition:** B 465; IE 471 #1-#3
5.M.4	Find volumes and surface areas of rectangular prisms. *This standard is intentionally the same as standard 6.M.6.*	**Student Edition:** 570-573, 575-578 *Hands-On Lab* 574 **Teacher Wraparound Edition:** A 573, 578; B 570, 575; DI 571, 576; F 572; IE 571; TT 571
5.M.5	Find the sum of the measures of the interior angles in triangles by measuring the angles, and without measuring the angles.	**Student Edition:** *Hands-On Lab* 526-527 **Teacher Wraparound Edition:** A 527; DI 523

	STANDARDS	PAGE REFERENCES
	Data Analysis, Statistics, and Probability Strand *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
5.D.1	Given a set of data, find the median, mean, mode, maximum, minimum, and range, and apply to solutions of problems.	**Student Edition:** 76-78, 80-83 *Spreadsheet Investigation* 79 *Graphing Calculator Investigation* 84-85 **Teacher Wraparound Edition:** A 78, 83; DI 76; GS 84; IE 77, 81-82; TT 80
5.D.2	Construct and interpret line plots, line graphs, and bar graphs. Interpret and label circle graphs.	**Student Edition:** 56-59, 62-65 *Problem-Solving Strategy* 54-55 *Spreadsheet Investigation* 60-61 **Teacher Wraparound Edition:** A 59; DI 57, 63; IE 55, 57-58, 63
5.D.3	Predict the probability of outcomes of simple experiments (e.g., tossing a coin, rolling a number cube) and test the predictions.	**Student Edition:** 428-431, 438-441, 450-453 *Hands-On Lab* 432 **Teacher Wraparound Edition:** A 430, 453; B 428; DI 429, 438; IE 429, 439
	Grades 5–6	
	Number Sense and Operations *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
6.N.1	Demonstrate an understanding of positive integer exponents, in particular, when used in powers of ten, e.g., 10^2, 10^5.	**Student Edition:** 20 #17-#18, #22, 21 #45-#47, 31 #57 *Extra Practice* 595 Lesson 1-4 #4
6.N.2	Demonstrate an understanding of place value to billions and thousandths.	**Student Edition:** 102-103, 105 #42-#43, #46-#48, 111, 113 #11-#22, 586 *Hands-On Lab* 107 *The Game Zone* 115 *Prerequisite Skills* 586 **Teacher Wraparound Edition:** A 105, 110; DI 103; IE 103, 112

STANDARDS		PAGE REFERENCES
6.N.3	Represent and compare very large (billions) and very small (thousandths) positive numbers in various forms such as expanded notation without exponents, e.g., 9724 = 9 x 1000 + 7 x 100 + 2 x 10 + 4.	**Student Edition:** 103, 104 #10-#40, 108-110 *Prerequisite Skills* 586 Example 2 – Example 3, 587 **Teacher Wraparound Edition:** A 110; DI 108; IE 103 #2, 109; PA 104
6.N.4	Demonstrate an understanding of fractions as a ratio of whole numbers, as parts of unit wholes, as parts of a collection, and as locations on the number line.	**Student Edition:** 182-185, 186-189, 198-199, 202-203, 400-403, 404 *Hands-On Lab* 181, 218, 234, 259, 270-271 *When* 206 *Concept Summary* 207 **Teacher Wraparound Edition:** B 182; IE 183, 187, 207, 401
6.N.5	Identify and determine common equivalent fractions, mixed numbers, decimals, and percents.	**Student Edition:** 183-185, 186-189, 395-397 *When* 182 **Teacher Wraparound Edition:** A 397; B 186, 395; DI 183, 395; IE 183, 187, 396
6.N.6	Find and position integers, fractions, mixed numbers, and decimals (both positive and negative) on the number line.	**Student Edition:** 105 #54-#59, 108 Example 1, 109 #1, 111 Example 1 - Example 2, 112 #1, 186, 295, 296 Example 6, #6-#9, #18, 297 #23-#30, #39, #52, 300-301, 429 **Teacher Wraparound Edition:** B 111; IE 295
6.N.7	Compare and order integers (including negative integers), and positive fractions, mixed numbers, decimals, and percents.	**Student Edition:** 108-110, 119 #42, 198-201, 205 #37-#40, 209 #50, 295 Example 4- Example 5, 296 #13, 297 #31-#39, 406 #35-#37 *Prerequisite Skills* 588 **Teacher Wraparound Edition:** A 110; B108; DI 108, 199; IE 109, 199, 295 #4-#5
6.N.8	Apply number theory concepts–including prime and composite numbers, prime factorization, greatest common factor, least common multiple, and divisibility rules for 2, 3, 4, 5, 6, 9, and 10–to the solution of problems.	**Student Edition:** 10- 13, 14-17, 21 #50-#56, 198 *The Game Zone* 23 **Teacher Wraparound Edition:** A 13, 17; B 10; DI 11, 15; IE 11, 15

STANDARDS		PAGE REFERENCES
6.N.9	Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers, and with positive fractions, mixed numbers, decimals, and percents. ●	**Student Edition:** 135-138, 141-143, 144-147, 152-155, 310-313, 350-353 *Hands-On Lab* 134, 139-140, 150-151 *The Game Zone* 149 *Prerequisite Skills* 590 **Teacher Wraparound Edition:** B 135; DI 136; IE 136
6.N.10	Use the number line to model addition and subtraction of integers, with the exception of subtracting negative integers. ●	**Student Edition:** 300-301, 304-306, 313 #48-#51 *Study Guide and Review* 325 8-2 **Teacher Wraparound Edition:** DI 301
6.N.11	Apply the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols (+, –, x, ÷). ●	**Student Edition:** 24-27, 30 #32-#43, 31 #55-#56, 37 #46-#48, 355 **Teacher Wraparound Edition:** A 27; B 24; IE 25
6.N.12	Demonstrate an understanding of the inverse relationship of addition and subtraction, and use that understanding to simplify computation and solve problems. ●	**Student Edition:** 339-342, 344-347, 353 #54-#61, 357 #29 *Hands-On Lab* 343, 354 **Teacher Wraparound Edition:** B 344; DI 340, 345; IE 340, 345
6.N.13	Accurately and efficiently add, subtract, multiply, and divide (with double-digit divisors) whole numbers and positive decimals. ▲	**Student Edition:** 121-124, 135-138, 141-143, 144-147, 152-155, 310-313, 350-353 *Hands-On Lab* 134, 139-140, 150-151 *The Game Zone* 149 *Prerequisite Skills* 590, 598 **Teacher Wraparound Edition:** B 135; DI 136; IE 122, 136
6.N.14	Accurately and efficiently add, subtract, multiply, and divide positive fractions and mixed numbers. Simplify fractions. ▲	**Student Edition:** 182-185, 198 #54, 228-231, 235-237, 239-240, 244-247 *The Game Zone* 233 *Hands-On Lab* 234 *Study Skill* 239 **Teacher Wraparound Edition:** B 182; IE 183, 229, 236, 245

STANDARDS		PAGE REFERENCES
6.N.15	Add and subtract integers, with the exception of subtracting negative integers. ▲	**Student Edition:** 300-303, 304-307, 313 #44-#51, 319 #36 **Teacher Wraparound Edition:** A 302; B 300, 304; DI 301, 305; IE 301, 305
6.N.16	Estimate results of computations with whole numbers, and with positive fractions, mixed numbers, decimals, and percents. Describe reasonableness of estimates. ▲	**Student Edition:** 116-119, 121-122, 124 #44-#47, 262 Example 2-Example 3, 415-417 *Prerequisite Skills* 592-593 **Teacher Wraparound Edition:** A 119, 417; DI 116, 415; IE 117, 416
	Patterns, Relations, and Algebra *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
6.P.1	Analyze and determine the rules for extending symbolic, arithmetic, and geometric patterns and progressions, e.g., ABBCCC; 1, 5, 9, 13 …; 3, 9, 27, …. ✚	**Student Edition:** 282-284, 298 #63-#65, 303 #49 *Problem-Solving Strategy* 280-281 *Study Guide and Review* 286 7-6 **Teacher Wraparound Edition:** A 281, 284; B 280, 282; DI 280, 282; IE 280, 283
6.P.2	Replace variables with given values and evaluate/simplify, e.g., 2(❍) + 3 when ❍ = 4. ●	**Student Edition:** 29-31, 35 Example 1, 36 #11-#20, 37 #46-#48 *Problem-Solving Strategy* 32-33 *Study Guide and Review* 44 1-6 **Teacher Wraparound Edition:** A 31; IE 29, 32
6.P.3	Use the properties of equality to solve problems, e.g., if □ + 7 = 13, then □ = 13 – 7, therefore □ = 6; if 3 x □ = 15, then $^1/_3$ x 3 x □ = $^1/_3$ x 15, therefore □ = 5. ●	**Student Edition:** 340-342, 345-347 *Hands-On Lab* 343 **Teacher Wraparound Edition:** A 342, 347; DI 340; IE 340, 345
6.P.4	Represent real situations and mathematical relationships with concrete models, tables, graphs, and rules in words and with symbols, e.g., input-output tables. ▲	**Student Edition:** 362-365, 366-369 *Hands-On Lab* 337, 343, 360-361 **Teacher Wraparound Edition:** B 366; DI 363, 366; IE 363, 367

STANDARDS		PAGE REFERENCES
6.P.5	Solve linear equations using concrete models, tables, graphs, and paper-pencil methods. ▲	**Student Edition:** 339-342, 344-347, 350-353, 355-357 *Hands-On Lab* 337-338, 343, 354 *Problem-Solving Strategy* 358-359 **Teacher Wraparound Edition:** IE 340, 351
6.P.6	Produce and interpret graphs that represent the relationship between two variables in everyday situations. ▲	**Student Edition:** 322 Example 4-Example 5, #14, 323 #37, 366-367 Example 1, 368 #18, 369 #20-#21 *When* 366 **Teacher Wraparound Edition:** IE 322
6.P.7	Identify and describe relationships between two variables with a constant rate of change. Contrast these with relationships where the rate of change is not constant. ■	**Student Edition:** 322 Example 4-Example 5, #14, 323 #37-#39, 362-365, 366-368 *Hands-On Mini Lab* 333 *Hands-On Lab* 360-361 **Teacher Wraparound Edition:** IE 322, 345
	Geometry *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
6.G.1	Identify polygons based on their properties, including types of interior angles, perpendicular or parallel sides, and congruence of sides, e.g., squares, rectangles, rhombuses, parallelograms, trapezoids, and isosceles, equilateral, and right triangles.	**Student Edition:** 322 Example 4-Example 5, #14, 323 #37, 366-367 Example 1, 368 #18, 369 #20-#21 *When* 366 **Teacher Wraparound Edition:** IE 322
6.G.2	Identify three-dimensional shapes (e.g., cubes, prisms, spheres, cones, and pyramids) based on their properties, such as edges and faces.	**Student Edition:** 564-566, 575 *Hands-On Lab* 567, 574 *Extending the Lesson* 578 *Study Guide and Review* 580 14-4 **Teacher Wraparound Edition:** B 564, 570; DI 564; IE 565

STANDARDS		PAGE REFERENCES
6.G.3	Identify relationships among points, lines, and planes, e.g., intersecting, parallel, perpendicular.	**Student Edition:** 321, 322 #2-#14, 515, 516 #2-#3, 517 #5-#6, #9, #11-#14, #18, 523 *Hands-On Lab* 513-514 *Extending the Lesson* 566 **Teacher Wraparound Edition:** IE 321, 516 #1
6.G.4	Graph points and identify coordinates of points on the Cartesian coordinate plane (all four quadrants). ●	**Student Edition:** 320-323 *Study Guide and Review* 326 *Standardized Test Practice* 329 Part 3 **Teacher Wraparound Edition:** A 323; B 320; DI 321; IE 321-322
6.G.5	Find the distance between two points on horizontal or vertical number lines. ●	**Student Edition:** *Standardized Test Practice* 329 #20b
6.G.6	Predict, describe, and perform transformations on two-dimensional shapes, e.g., translations, rotations, and reflections. ▲	**Student Edition:** 529 Example 5-Example 6, 530 #7-#9, 531 #18-#24, #26 *Hands-On Lab* 532-533, 537 **Teacher Wraparound Edition:** IE 529 #5-#6; TT 528
6.G.7	Identify types of symmetry, including line and rotational. ▲	**Student Edition:** 528-531 *Getting Started* 505 #3-#4 *Study Guide and Review* 540 13-5 **Teacher Wraparound Edition:** A 531; B 528; DI 529; IE 529
6.G.8	Determine if two shapes are congruent by measuring sides or a combination of sides and angles, as necessary; or by motions or series of motions, e.g., translations, rotations, and reflections. ▲	**Student Edition:** 534-536 *Study Guide and Review* 540 *Practice Test* 541 #15 **Teacher Wraparound Edition:** DI 534; IE 535
6.G.9	Match three-dimensional objects and their two-dimensional representations, e.g., nets, projections, and perspective drawings. ■	**Student Edition:** 575-578 *Problem-Solving Strategy* 568 *Hands-On Lab* 574 **Teacher Wraparound Edition:** B 575; DI 576; IE 576

	STANDARDS	PAGE REFERENCES
	Measurement *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
6.M.1	Apply the concepts of perimeter and area to the solution of problems. Apply formulas where appropriate. ●	**Student Edition:** 39-41, 158-160, 161-164, 257 Example 4, 551-554, 556-559 *Hands-On Lab* 464, 550, 555 *Spreadsheet Investigation* 469 **Teacher Wraparound Edition:** A 41; B 39, 158; DI 40, 158, 162; IE 40, 159, 162, 257 #4
6.M.2	Identify, measure, describe, classify, and construct various angles, triangles, and quadrilaterals. ●	**Student Edition:** 506-509, 510-512, 522-525 *Hands-On Lab* 513-514, 526-527 **Teacher Wraparound Edition:** A 509, 512, 525; B 506, 510; DI 507, 510; IE 507, 510
6.M.3	Solve problems involving proportional relationships and units of measurement, e.g., same system unit conversions, scale models, maps, and speed. ●	**Student Edition:** 392 Example 2, #3-#9, 393, 465 Example 1, 466 Example 2, 467 #1, #3-#5, #10, #12-#17, 468 #28-#29, #36, 471-473 *Hands-On Mini Lab* 470 *Hands-On Lab* 474-475 **Teacher Wraparound Edition:** B 465; IE 471 #1-#3
6.M.4	Find areas of triangles and parallelograms. Recognize that shapes with the same number of sides but different appearances can have the same area. Develop strategies to find the area of more complex shapes. ●	**Student Edition:** 39-41, 257 Example 4, 551-554 *Hands-On Lab* 464, 550, 555 *Spreadsheet Investigation* 469 **Teacher Wraparound Edition:** A 41; B 39; DI 40; IE 40, 257 #4, 552
6.M.5	Identify, measure, and describe circles and the relationships of the radius, diameter, circumference, and area (e.g., d = 2r, π = C/d), and use the concepts to solve problems. ●	**Student Edition:** 161-164, 556-559 *Hands-On Lab* 560-561 **Teacher Wraparound Edition:** A 164, 559, 561; B 161, 556; DI 162, 163, 557; IE 162, 557

STANDARDS		PAGE REFERENCES
6.M.6	Find volumes and surface areas of rectangular prisms. ●	**Student Edition:** 570-573, 575-578 *Hands-On Lab* 574 **Teacher Wraparound Edition:** A 573, 578; B 570, 575; DI 571, 576; F 572; IE 571; TT 571
6.M.7	Find the sum of the angles in simple polygons (up to eight sides) with and without measuring the angles. ●	**Student Edition:** *Extending the Lesson* 525 *Hands-On Lab* 526-527 **Teacher Wraparound Edition:** A 525, 527; DI 523
	Data Analysis, Statistics, and Probability *Students engage in problem solving, communicating, reasoning, connecting, and representing as they:*	
6.D.1	Describe and compare data sets using the concepts of median, mean, mode, maximum and minimum, and range. ●	**Student Edition:** 76-78, 80-83 *Spreadsheet Investigation* 79 *Graphing Calculator Investigation* 84-85 **Teacher Wraparound Edition:** A 78, 83; DI 76; GS 84; IE 77, 81-82; TT 80
6.D.2	Construct and interpret stem-and-leaf plots, line plots, and circle graphs. ●	**Student Edition:** 56-59, 62-65, 72-77 *Problem-Solving Strategy* 54-55 *Spreadsheet Investigation* 60-61 **Teacher Wraparound Edition:** A 59, 75; DI 57, 63, 73; IE 55, 57-58, 63, 73
6.D.3	Use tree diagrams and other models (e.g., lists and tables) to represent possible or actual outcomes of trials. Analyze the outcomes. ■	**Student Edition:** 50-53, 433-436 *Hands-On Lab* 426-427 *Problem-Solving Strategy* 448-449 **Teacher Wraparound Edition:** A 53, 436; DI 433; IE 434
6.D.4	Predict the probability of outcomes of simple experiments (e.g., tossing a coin, rolling a die) and test the predictions. Use appropriate ratios between 0 and 1 to represent the probability of the outcome and associate the probability with the likelihood of the event. ■	**Student Edition:** 428-431, 438-441, 450-453 *Hands-On Lab* 432 **Teacher Wraparound Edition:** A 430, 453; B 428; DI 429, 438; IE 429, 439