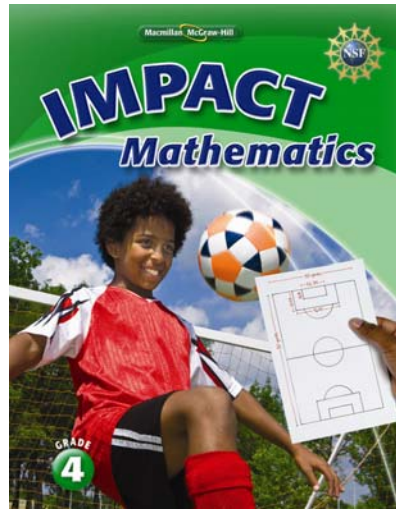
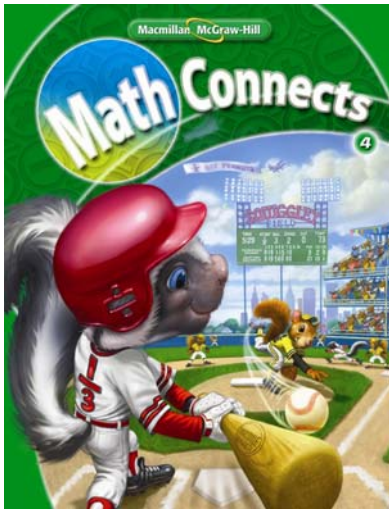




Macmillan/McGraw-Hill

Fourth Grade Mathematics
Grade Level Content
Expectations



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STANDARDS	PAGE REFERENCES
NUMBER AND OPERATIONS	
Understand and use number notation and place value	
<p>N.ME.04.01 Read and write numbers to 1,000,000; relate them to the quantities they represent; compare and order.</p> <p>G4-FP8C</p>	<p>Student Edition: 17-19, 22-25, 28-30, 32-34 Chapter Test 49 #6-8, #10, #11, #13-15 Data File 34 Example 18 Extra Practice R2 Mid-Chapter Check 31 #1-4, #6, #11-13, #16, #17 Real-World Example 28, 29, 32, 33 Real-World Problem Solving 19, 30 Study Guide and Review 45 #7-9, #12-14, 47 Test Practice 25, 50 #2, #7</p> <p>Teacher Edition: A 34; AE 18, 29; ATS 29, 33; CE 24; FMB 17A; I 17, 32; IWO 17B, 32B; SGO 28B</p>

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

Correlation codes beginning with "G4" refer to the Focal Point. Full descriptions of the Focal Points are located in the front matter of the *Math Connects* Teacher Edition.

STANDARDS	PAGE REFERENCES
<p>N.ME.04.02 Compose and decompose numbers using place value to 1,000,000's, e.g., 25,068 is 2 ten thousands, 5 thousands, 0 hundreds, 6 tens, and 8 ones.</p> <p>G4-FP8C</p>	<p>Student Edition: 17-19, 22-25 Extra Practice R2 Mid-Chapter Check 31 #3, #4, #10, #18 Real-World Example 22, 23 Real-World Problem Solving 19, 24 Study Guide and Review 45 #7-9, #12-14</p> <p>Teacher Edition: AE 18, 23; ATS 23; IWO 17B; T 17</p>
<p>N.ME.04.03 Understand the magnitude of numbers up to 1,000,000; recognize the place values of numbers and the relationship of each place value to the place to its right, e.g., 1,000 is 10 hundreds.</p> <p>G4-FP8C</p>	<p>Student Edition: 17-19, 22-25 Chapter Test 49 #3, #4 Example 17 Extra Practice R2 H.O.T. Problems 19 Mid-Chapter Check 31 #7, #8 Study Guide and Review 45 #10, #11 Test Practice 51 #5, #9</p> <p>Teacher Edition: A 19; I 22</p>
<p>Use factors and multiples</p>	
<p>N.ME.04.04 Find all factors of any whole number through 50, list factor pairs, and determine if a one-digit number is a factor of a given whole number.</p> <p>G4-FP1</p>	<p>Student Edition: 176-179 #1-4, #11-18, #27, #28, #36, #40 Chapter Test 187 #6, #7, #14, #21 Extra Practice R12 Real-World Example 176 Study Guide and Review 186</p> <p>Teacher Edition: Differentiated Instruction 176 B, ATS 177</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 5-6, 11</p> <p>Teacher Guide: T5-T6</p>

STANDARDS	PAGE REFERENCES
<p>N.ME.04.05 List the first ten multiples of a given one-digit whole number; determine if a whole number is a multiple of a given one-digit whole number.</p> <p>G4-FP1</p>	<p>Student Edition: 177 #5-8, 178 #19-26, #29, #30, #33 Chapter Test 187 #15, #16 Example 177 Extra Practice R12 Remember 177 Study Guide and Review 186</p> <p>Teacher Edition: 176A, 176B, 176</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 5-6, 11</p> <p>Teacher Guide: T5-T6</p>
<p>N.MR.04.06 Know that some numbers including 2, 3, 5, 7, and 11 have exactly two factors (1 and the number itself) and are called prime numbers.</p> <p>G4-FP1</p>	<p>Opportunities to address:</p> <p>Student Edition: 178 #12 Test Practice 188 #3</p> <p>Teacher Edition: S 142H; T 176</p> <p>Michigan Map for Success: Lesson 1 (MI 23)</p>
<p>N.MR.04.07 Use factors and multiples to compose and decompose whole numbers.</p> <p>G4-FP1</p>	<p>Student Edition: 176-177 #1-9, 178 #19-26, #29, #30, #33 Chapter Test 187 #6, #7, #14, 21 Real-World Example 176 Study Guide and Review 186 #68 Test Practice 179, 188 #7, #10</p> <p>Teacher Edition: IWO 176B</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 5-6</p> <p>Teacher Guide: T5-T6</p>

STANDARDS	PAGE REFERENCES
Add and subtract whole numbers	
<p>N.FL.04.08 Add and subtract whole numbers fluently.</p> <p>G4-FP4C/G4-FP8C</p>	<p>Student Edition: 64-67, 70-71, 72-74, 80-83 Are You Ready 54 Chapter Test 89 #16, #17 Data File 66 Explore 70-71 Extra Practice R5 Game Time 75 Mid-Chapter Check 69 #13 Mixed Problem Solving 77 #1-3 Start Smart 4 Test Practice 67, 83, 90 #1, #8, #11</p>
Multiply and divide whole numbers	
<p>N.ME.04.09 Multiply two-digit numbers by 2, 3, 4, and 5 using the distributive property, e.g., $21 \times 3 = (1 + 20) \times 3 = (1 \times 3) + (20 \times 3) = 3 + 60 = 63$.</p> <p>G4-FP1</p>	<p>Student Edition: 166-168, 250-251, 282-283 Explore 282-283 Real-World Example 166, 247</p> <p>Teacher Edition: FMB 166A, 284A; I 284; FA 169</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 3-4</p> <p>Teacher Guide: T3-T4</p>

STANDARDS	PAGE REFERENCES
<p>N.FL.04.10 Multiply fluently any whole number by a one-digit number and a three-digit number by a two-digit number; for a two-digit by one-digit multiplication use distributive property to develop meaning for the algorithm.</p> <p>G4-FP1</p>	<p>Student Edition: 237-239, 240-241, 242-244, 246-248, 250-251, 252-255, 257, 258-261, 273-275, 276-279, 284-286, 288-290, 293 Are You Ready 236, 272 Chapter Test 267 #12, #13, #17, #18, 305 #1-4, #12, #13 Data File 248 Example 247, 253 Extra Practice R16-R19 Game Time 245 Mid-Chapter Check 249 #11-16, 287 #1, #2, #11-14 Real-World Example 252, 284, 285, 288, 289 Real-World Problem Solving 254, 286, 290 Remember 289 Study Guide and Review 264, 265, 303</p> <p>Teacher Edition: ATS 285, 289; CE 247; FMB 246A, 284A; IWO 246B, 288B; SGO 246B, 284B, 288B</p> <p>Impact Mathematics Grade 4 Student Edition: 3-4, 7 Teacher Guide: T3-T4, T7-T8</p>

STANDARDS	PAGE REFERENCES
<p>N.FL.04.11 Divide numbers up to four-digits by one-digit numbers and by 10.</p> <p>G4-FP8C</p>	<p>Student Edition: 313-315, 316-319, 322-324, 326-329, 332-335, 336-338, 341, 342-345 Big Idea 308 Chapter Test 353 #3, #4, #11, #12, #17, #18 Explore 311-312 Extra Practice R20-R22 Game Time 339 Real-World Example 313, 314, 326, 327, 332, 333, 336, 337, 342, 343 Real-World Problem Solving 315, 328, 334, 338, 344 Study Guide and Review 347, 349, 351</p> <p>Teacher Edition: ATS 314, 327, 333; IC 308; T 326</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 7-8, 9-10, 11-12, A1-A2</p> <p>Teacher Guide: T7-T8, T9-T10, T11-T12, A3-A4</p>
<p>N.FL.04.12 Find the value of the unknowns in equations such as $a \div 10 = 25$; $125 \div b = 25$.</p> <p>G4-FP1/G4-FP4C</p>	<p>Student Edition: 156 #27-30; 196-197, 198-201, 208-211, 213, 220-223 Chapter Test 231 #12, #13, 267 #19, #20 Mid-Chapter Check 163 #10, #11, #15-17 Test Practice 157, 188 #7, 268 #2, 307 #9, 355 #13, 390 #2</p>

STANDARDS	PAGE REFERENCES
<p>N.MR.04.13 Use the relationship between multiplication and division to simplify computations and check results.</p> <p>G4-FP1/G4-FP8C</p>	<p>Student Edition: 147-149, 323 #1-6, 324 #9-20 Example 147, 317 Extra Practice R9 H.O.T. Problems 149 Mid-Chapter Check 163 #1-7 Real-World Example 148, 161, 167, 322, 323 Study Guide and Review 181</p> <p>Teacher Edition: A 149; AE 148; IWO 147B</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 7-8, 9-10, 11-12, 19-20, A1-A2, A5-A6</p> <p>Teacher Guide: T7-T8, T9-T10, T11-T12, T19-T20, A3-A4, A7-A8</p>
<p>N.MR.04.14 Solve contextual problems involving whole number multiplication and division.</p> <p>G4-FP1/G4-FP4C/G4-FP8C</p>	<p>Student Edition: 148 #9, 152 #7, #21, #22, 155 #9, 156 #33, #34, #35, #36, 159 #6, #7, #11, #12, 162 #27-30, 168 #34 -40, 173 #26, #29, 254 #29, #30, 260 #23, #24, 315 #27, #28, 328 #25, #26 Big Idea 142, 308 Chapter Test 187 #5, 267 #14, 321, 353 #13, #16, #19 Data File 149, 248 Mid-Chapter Check 163 #14, #18, #19, 325 #1 Real-World Example 148, 151, 154, 155, 160, 161, 166, 167, 172, 258, 259, 313, 314, 326, 327, 332, 333 Real-World Math 165, 257 Real-World Problem Solving 156, 162, 168, 174, 239, 254, 260, 315, 328, 334 Start Smart 5 Test Practice 188 #1, #11, 268 #1, #11-14, 354 #7-9</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 8, 9-10, 11-12, A2</p> <p>Teacher Guide: T9-T10, T11-T12, A3-A4</p>

STANDARDS	PAGE REFERENCES
Read, interpret and compare decimal fractions	
<p>N.ME.04.15 Read and interpret decimals up to two decimal places; relate to money and place value decomposition.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 577-578, 579-581, 582-585, 596-598, 631 #5, #7, #8, 632 #16, #17, #19, #23, #24, 639 #3, #5, 640 #14, #16, #18 Big Idea 574 Chapter Test 611 #5, #6, #8, #9 Example 579, 580, 582 Extra Practice R36 Mid-Chapter Check 593 #1-#7 Real-World Example 583 Study Guide and Review 607 Test Practice 613 #8</p> <p>Teacher Edition: A 581; ATS 580; IWO 579B; SGO 579B, 582B; T 579, 582</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 46, 47-48, 54</p> <p>Teacher Guide: T47-T48, T49, T53-T54</p>
<p>N.ME.04.16 Know that terminating decimals represents fractions whose denominators are 10, 10 x 10, 10 x 10 x 10, etc., e.g., powers of 10.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 579-581, 596-598 Example 579, 580, 582, 596 Explore 577-578 Real-World Example 583</p> <p>Teacher Edition: CE 584; FMB 596A</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 45, 47-48, 49-50, A18</p> <p>Teacher Guide: T47-T48, T49-T50, A19</p>

STANDARDS	PAGE REFERENCES
<p>N.ME.04.17 Locate tenths and hundredths on a number line.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 588-589, 598 #27-30 Chapter Test 611 #17 Example 588, 596 Extra Practice R37 Mid-Chapter Check 593 #16 Real-World Example 602 Study Guide and Review 608 Test Practice 612 #1, #10, #13</p> <p>Teacher Edition: ATS 589; ELL 588B; IWO 588B</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 51-52, A18</p> <p>Teacher Guide: T51-T52, A19-A20</p>
<p>N.ME.04.18 Read, write, interpret, and compare decimals up to two decimal places.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 577-578, 579-581, 582-584, 590-592, 596-598 Big Idea 574 Chapter Test 611 #8 Example 579, 580, 582, 591 Extra Practice R36, R37 Mid-Chapter Check 593 #1-7, #14, #17-20 Real-World Example 583, 590 Study Guide and Review 607, 609</p> <p>Teacher Edition: A 581; ATS 580, 583, 591; IWO 579B, 590B; SGO 590B; T 579, 590; TOD 581</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 47-48, 49-50, 51-52, 53-54, 56</p> <p>Teacher Guide: T47-T48, T49-T50, T51-T52, T53-T54, T55-T56</p>

STANDARDS	PAGE REFERENCES
<p>N.MR.04.19 Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 579-581, 596-598 Chapter Test 611 #5, #6, #8, #9, #12, #13 Example 579, 580, 582, 596, 597 Explore 577-578 Extra Practice R36, R38 Mid-Chapter Check 593 #1-6 Study Guide and Review 607, 610 Test Practice 613 #8, #11</p> <p>Teacher Edition: IWO 579B, 596B</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 46, 47-48, 49-50, 51-52, 55-56, A18</p> <p>Teacher Guide: T47-T48, T49-T50, T51-T52, T55-T56, A19-A20</p>
<p>Understand fractions</p>	
<p>N.ME.04.20 Understand fractions as parts of a set of objects.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 540-542, 545 #10 Data File 542 Example 540, 544 Extra Practice R34 H.O.T. Problems 543 Mid-Chapter Check 553 #6-10 Real-World Example 540, 541 Study Guide and Review 567</p> <p>Teacher Edition: A 543; AE 540; ATS 541; I 540; IWO 540B; T 540</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 33-34, 35-36, 37-38</p> <p>Teacher Guide: T33-T34, T35-T36, T37-T38</p>

STANDARDS	PAGE REFERENCES
<p>N.MR.04.21 Explain why equivalent fractions are equal, using models such as fraction strips or the number line for fractions with denominators of 12 or less, or equal to 100.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 548-551 Example 549 Explore 546-547 Mid-Chapter Check 553 #13-16</p> <p>Teacher Edition: A 551; ATS 549</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 37-38</p> <p>Teacher Guide: T37-T38</p>
<p>N.MR.04.22 Locate fractions with denominators of 12 or less on the number line; include mixed numbers.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 550 #9, 551 #23, #24, 562 #8, #9, #23, #24, 588-589, 603 #21-24 Chapter Test 571 #14, #15 Example 549, 555, 561, 588 Extra Practice R37 H.O.T. Problems 589 Real-World Example 554 Study Guide and Review 608 Test Practice 572 #6, #11</p> <p>Teacher Edition: A 589; ATS 589; CE 562; IWO 588B; SGO 588B</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 39-40</p> <p>Teacher Guide: T39-T40</p>
<p>N.MR.04.23 Understand the relationships among halves, fourths, and eighths and among thirds, sixths, and twelfths.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 548-551 Example 548, 549 Explore 546-547</p> <p>Teacher Edition: IWO 537B</p>

STANDARDS	PAGE REFERENCES
<p>N.ME.04.24 Know that fractions of the form m/n where m is greater than n, are greater than 1 and are called improper fractions; locate improper fractions on the number line.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 560-563, 571 #11, #12 Example 561 Real-World Example 560</p> <p>Teacher Edition: FMB 560A; IWO 560B</p>
<p>N.MR.04.25 Write improper fractions as mixed numbers, and understand that a mixed number represents the number of “wholes” and the part of a whole remaining, e.g., $5/4 = 1 + 1/4 = 1\frac{1}{4}$.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 560-563 Chapter Test 571 #11, #12 Example 561 Extra Practice R35 Real-World Example 560 Study Guide and Review 570 Test Practice 572 #5, #8, #14, #15</p> <p>Teacher Edition: A 563; ATS 562; IWO 560B; T 560</p>
<p>N.MR.04.26 Compare and order up to three fractions with denominators 2, 4, and 8, and 3, 6, and 12, including improper fractions and mixed numbers.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 554-556, 602-603 Chapter Test 571 #9, #10 Example 555 Extra Practice R35 Real-World Example 554 Study Guide and Review 569 Test Practice 572 #4</p> <p>Teacher Edition: A 557; AE 555; ATS 555; IWO 554B; SGO 554B; T 554; TOD 557</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 38, 40</p> <p>Teacher Guide: T37-T38, T39-T40</p>

STANDARDS	PAGE REFERENCES
Add and subtract fractions	
<p>N.MR.04.27 Add and subtract fractions less than 1 with denominators through 12 and/or 100, in cases where the denominators are equal or when one denominator is a multiple of the other, e.g., $1/12+5/12=6/12$; $1/6+5/12=7/12$; $3/10-23/100=7/100$.</p> <p>G4-FP8C</p>	<p>Student Edition: LA14-LA17 Example LA14, LA15</p> <p>Teacher Edition: AE LA15; ATS LA16; CE LA15; FMB LA14A; I LA14; IWO LA14B; T LA14</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 41-42</p> <p>Teacher Guide: T41-T42</p> <p>Michigan Map for Success: Lesson 2 (MI 25 – MI 26)</p>
<p>N.MR.04.28 Solve contextual problems involving sums and differences for fractions where one denominator is a multiple of the other (denominators 2 through 12, and 100).</p> <p>G4-FP8C</p>	<p>Student Edition: LA16 #25, LA17 #26-#29 Example LA15 Real-World Problem Solving LA17</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 41-42</p> <p>Teacher Guide: T41-T42</p>
<p>N.MR.04.29 Find the value of an unknown in equations such as $1/8+ x=5/8$ or $3/4-y=1/2$.</p> <p>G4-FP1/G4-FP4C</p>	<p>Student Edition: 198-200 (can be adapted to meet this standard for fractions) LA14-LA17</p> <p>Michigan Map for Success: Lesson 2 (MI 25 – MI 26)</p>
Multiply fractions by whole numbers	
<p>N.MR.04.30 Multiply fractions by whole numbers, using repeated addition and area or array models.</p> <p>G4-FP1</p>	<p>The following page reference can be expanded through class activity to include fractions.</p> <p>Student Edition: Explore 145</p> <p>Michigan Map for Success: Lesson 3 (MI 28)</p>

STANDARDS	PAGE REFERENCES
Add and subtract decimal fractions	
<p>N.MR.04.31 For problems that use addition and subtraction of decimals through hundredths, represent with mathematical statements and solve.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 631 #7, #8, 632 #21, #22, 639 #7, 640 #21-24 Chapter Test 649 #7, #13 Data File 632 Example 631, 638, 639 Mid-Chapter Check 633 #16 Real-World Math 643 Real-World Problem Solving 640 Test Practice 650 #1-3, #6, #11, #13</p> <p>Teacher Edition: AE 631, 639</p>
<p>N.FL.04.32 Add and subtract decimals through hundredths.</p> <p>G4-FP2/G4-FP8C</p>	<p>Student Edition: 630-632, 638-641 Chapter Test 649 #5, #6, #9, #10 Explore 628-629, 636-637 Extra Practice R40, R41 Real-World Example 630, 631, 638, 639 Study Guide and Review 647, 648</p> <p>Teacher Edition: A 641; ATS 631, 639; CE 631, 640; IWO 630B, 638B; SGO 630B; T 630, 638; TOD 641</p>
Multiply and divide decimal fractions	
<p>N.FL.04.33 Multiply and divide decimals up to two decimal places by a one-digit whole number where the result is a terminating decimal, e.g., $0.42 \div 3 = 0.14$, but not $5 \div 3 = 1.6$.</p> <p>G4-FP8C</p>	<p>The following references can be expanded to include decimals to meet this standard.</p> <p>Student Edition: 332-334 Real-World Example 332</p> <p>Teacher Edition: ATS 333</p> <p>Michigan Map for Success: Lesson 4 (MI 30 – MI 31)</p>

STANDARDS	PAGE REFERENCES
Estimate	
<p>N.FL.04.34 Estimate the answers to calculations involving addition, subtraction, or multiplication.</p> <p>G4-FP1/G4-FP2/G4-FP4C/G4-FP8C</p>	<p>Student Edition: 58-60, 242-244, 276-279, 622-624 Example 58, 59, 242 Extra Practice R4, R16, R39 Game Time 245 Key Concept 622, 623 Real-World Example 58, 59, 242, 243, 622, 623 Study Guide and Review 85, 264, 645</p> <p>Teacher Edition: A 61, 242, 625; ATS 59, 243, 623; IWO 58B; SGO 242B</p> <p>Impact Mathematics Grade 4 Student Edition: 23-24, 25-26, 27-28, 31-32, A10 Teacher Guide: T23-T24, T25-T26, T27-T28, T31-T32, A11-A12</p>
<p>N.FL.04.35 Know when approximation is appropriate and use it to check the reasonableness of answers; be familiar with common place-value errors in calculations.</p> <p>G4-FP1/G4-FP4C/G4-FP8C</p>	<p>Student Edition: 62-63, 240-241</p> <p>Teacher Edition: A 63, 241; ATS 63; CE 38, 60; T 62, 240</p> <p>Impact Mathematics Grade 4 Student Edition: 25-26, 31, A10 Teacher Guide: T25-T26, T31, A11-A12</p>

N.FL.04.36 Make appropriate estimations and calculations .fluently with whole numbers using mental math strategies.

G4-FP1/G4-FP4C/G4-FP8C

Student Edition:

58-60, 242-244, 276-279, 322-324

Data File 324

Example 58, 59, 242

Real-World Example 58, 59, 242, 243, 322, 323

Real-World Problem Solving 60, 244

Teacher Edition:

AE 59, 243, 323; ATS 59, 243, 323; T 322

Impact Mathematics Grade 4

Student Edition:

23-24, 25-26, 27-28, 31-32, A10

Teacher Guide:

T23-T24, T25-T26, T27-T28, T31-T32, A11-A12

STANDARDS	PAGE REFERENCES
MEASUREMENT	
Measure using common tools and appropriate units	
<p>M.UN.04.01 Measure using common tools and select appropriate units of measure.</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: 442-443, 451-452, 487-488, 499-500 Explore 439-440, 448-449, 485-486, 496-497 Game Time 511 Key Concepts 441, 450 Real-World Example 441, 442, 450, 451, 486, 487, 498, 499</p> <p>Teacher Edition: A 452, 500; ATS 442, 451, 487, 499; I 486, 498; IWO 441B, 451B, 498B; SGO 441B, 451B, 486B; T 441, 450</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 81-82, 83-84, 85-86, 87-88, A30</p> <p>Teacher Guide: T81-T82, T83-T84, T85-T86, T87-T88, A31-A32</p>
<p>M.PS.04.02 Give answers to a reasonable degree of precision in the context of a given problem.</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: 442-443, 451-452, 487-488, 499-500</p> <p>Teacher Edition: A 443, 452, 489</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 81-82, 83-84, 85-86, 87-88, A30</p> <p>Teacher Guide: T81-T82, T83-T84, T85-T86, T87-T88, A31-A32</p>

STANDARDS	PAGE REFERENCES
<p>M.UN.04.03 Measure and compare integer temperatures in degrees.</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: 468-471 Extra Practice R30 Hands-On Mini Activity 469 Real-World Example 468 Study Guide and Review 478 Test Practice 481 #12</p> <p>Teacher Edition: ATS 469; IWO 468B; SGO 468B; T 468</p> <p>Impact Mathematics Grade 4 Student Edition: 75-76, 77-78 Teacher Guide: T75-T76, T77-T78</p>
<p>M.TE.04.04 Measure surface area of cubes and rectangular prisms by covering and counting area of the faces.</p> <p>G4-FP5C, G4-FP6C</p>	<p>Student Edition: LA22-LA25 Example LA23 Hands-On Mini Activity LA22 Key Concepts LA23</p> <p>Teacher Edition: A LA25; ATS LA24; CE LA25; I LA22; IWO LA22B</p>
<p>Convert measurement units</p>	
<p>M.TE.04.05 Carry out the following conversions from one unit of measure to a larger or smaller unit of measure: meters to centimeters, kilograms to grams, liters to milliliters, hours to minutes, minutes to seconds, years to months, weeks to days, feet to inches, ounces to pounds (using numbers that involve only simple calculations).</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: 445, 459 #27, 473 #8, #9, #11, 504-507, 528 #30-32, #35, #36, Chapter Test 479 #5, 531 #10 Concepts and Skills R63 Mid-Chapter Check 453 #4</p> <p>Impact Mathematics Grade 4 Student Edition: 70, 79 Teacher Guide: T70, T79-T80</p> <p>Michigan Map for Success: Lesson 5 (MI 33)</p>

STANDARDS	PAGE REFERENCES
Use perimeter and area formulas	
<p>M.TE.04.06 Know and understand the formulas for perimeter and area of a square and a rectangle; calculate the perimeters and areas of these shapes and combinations of these shapes using the formulas.</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: 456-459, 460-462 Big Idea 436 Chapter Test 479 #7-10, #14 Concepts and Skills R66, R67 Extend 464-465 Extra Practice R29 Game Time 463 H.O.T. Problems 458 Key Concepts 456, 460, 461, R66 Real-World Example 456, 457, 460, 461 Real-World Problem Solving 458 Study Guide and Review 475, 476 Test Practice 480 #3, #7, #8, #10</p> <p>Teacher Edition: A 462; AE 457, 461; ATS 457, 461; CE 458, 462</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 59-60, 61-62, 63-64, 65-66, A21-A22</p> <p>Teacher Guide: T59-T60, T61-T62, T63-T64, T65-T66, A23-A24</p>
<p>M.TE.04.07 Find one dimension of a rectangle given the other dimension and its perimeter or area.</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: 462 #17-19</p> <p>Teacher Edition: ATS 457</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 62, A21-A22</p> <p>Teacher Guide: T62, A23-A24</p> <p>Michigan Map for Success: Lesson 6 (MI 35)</p>

STANDARDS	PAGE REFERENCES
<p>M.TE.04.08 Find the side of a square given its perimeter or area.</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: 462 #17 Key Concepts 376</p> <p>Teacher Edition: A 459; ATS 457; T 456</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 62 #8, #10</p> <p>Teacher Guide: T61-T62</p> <p>Michigan Map for Success: Lesson 6 (MI 35)</p>
<p>M.PS.04.09 Solve contextual problems about perimeter and area of squares and rectangles in compound shapes.</p> <p>G4-FP3/G4-FP5C</p>	<p>Student Edition: Concepts and Skills R66, R67 H.O.T. Problems 458</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 65</p>
<p>Understand right angles</p>	
<p>M.TE.04.10 Identify right angles and compare angles to right angles.</p> <p>G4-FP5C/G4-FP6C</p>	<p>Student Edition: 368, 369 #4-6, 370 #11-16 Chapter Test 389 #10, #11 Example 369 Extra Practice R24 Key Concept 369 Mid-Chapter Check 371 #13, #14 Study Guide and Review 387 Test Practice 390 #5, #14</p> <p>Teacher Edition: A 370; AE 369; ATS 369</p>

STANDARDS	PAGE REFERENCES
Problem-solving	
<p>M.PS.04.11 Solve contextual problems about surface area.</p> <p>G4-FP5C/G4-FP6C</p>	<p>Student Edition: LA22-LA25 Writing in Math LA25</p>
GEOMETRY	
Understand perpendicular, parallel, and intersecting lines	
<p>G.GS.04.01 Identify and draw perpendicular, parallel, and intersecting lines using a ruler and a tool or object with a square (90°) corner.</p> <p>G4-FP5C</p>	<p>Student Edition: 402 #4, #9-15 Explore 398-399 Extra Practice R25 H.O.T. Problems 403 Key Concept 401 Remember 401 Study Guide and Review 429 Test Practice 403, 434 #1, #3</p> <p>Teacher Edition: ATS 401; CE 402; IWO 400B; SGO 400B; TOD 403</p>
Identify basic geometric shapes and their components, and solve problems	
<p>G.GS.04.02 Identify basic geometric shapes including isosceles, equilateral, and right triangles, and use their properties to solve problems.</p> <p>G4-FP5C/G4-FP6C</p>	<p>Student Edition: 362-365, 372-374, 376-378 Are You Ready 358 Chapter Test 389 #1-3, #5, #6, #8, #9 Data File 374 Extra Practice R23, R24 Game Time 379 H.O.T. Problems 365, 375, 378 Key Concept 362, 372, 373, 376 Mid-Chapter Check 371 #4, #5, #7, #8 Real-World Example 362, 377 Real-World Problem Solving 364 Study Guide and Review 385, 387, 388 Test Practice 390 #3, #13</p> <p>Teacher Edition: A 365, 378; AE 363, 373; ATS 363, 373; CP 356; ELL 362B; I 362; IC 356; IWO 372B; T 362, 372, 376</p>

STANDARDS	PAGE REFERENCES
<p>G.SR.04.03 Identify and count the faces, edges, and vertices of basic three-dimensional geometric solids including cubes, rectangular prisms, and pyramids; describe the shape of their faces.</p> <p>G4-FP5C/G4-FP6C</p>	<p>Student Edition: 359-361 Are You Ready 358 Chapter Test 389 #7 Extra Practice R23 H.O.T. Problems 361 Key Concepts 359 Mid-Chapter Check 371 #1, #2 Real-World Example 359 Start Smart 10-11 Study Guide and Review 385 Test Practice 390 #1, #7, #12</p> <p>Teacher Edition: A 261; AC 11; AE 260; ATS 360; I 359; T 359; TDF 11</p>
<p>Recognize symmetry and transformations</p>	
<p>G.TR.04.04 Recognize plane figures that have line symmetry.</p> <p>G4-FP5C/G4-FP6C</p>	<p>Student Edition: 422-424 Chapter Test 433 #11-13 Example 422 Extra Practice R27 Game Time 425 H.O.T. Problems 424 Real-World Math 427 Study Guide and Review 432 Test Practice 435 #2, #3</p> <p>Teacher Edition: A 424; AE 423; ATS 423; CE 423; IWO 422B; T 422; TOD 424</p> <p>Impact Mathematics Grade 4 Student Edition: 101-102, 107-108, A37 Teacher Guide: T101-T102, T107-T108, A39-A40</p>

STANDARDS	PAGE REFERENCES
<p>G.TR.04.05 Recognize rigid motion transformations (flips, slides, turns) of a two-dimensional object.</p> <p>G4-FP5C/G4-FP6C</p>	<p>Student Edition: 412-414 Chapter Test 433 #1, #2 Example 412, 413 Explore 410-411 Extra Practice R26 H.O.T. Problems 415 Key Concept 413 Real-World Example 413 Study Guide and Review 431 Test Practice 435 #14, #15</p> <p>Teacher Edition: AE 413; ATS 413; IWO 412B; SGO 412B; T 412</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 101-102, 105-106, 107-108</p> <p>Teacher Guide: T101-T102, T105-T106, T107-T108</p>
DATA AND PROBABILITY	
Represent and solve problems for given data	
<p>D.RE.04.01 Construct tables and bar graphs from given data.</p> <p>G4-FP7C</p>	<p>Student Edition: 96 #2, 97 #7, #8 Example 95 Extend 116-117 Mid-Chapter Check 111 #1 Study Guide and Review 133 #7, #8</p> <p>Teacher Edition: IWO 112B; M 92J; R 92J; S 92I; SGO 108B, 112B; W 92I</p> <p>Impact Mathematics Grade 4</p> <p>Student Edition: 89-90, 91-92, 93-94, 95-96, 97-98, A34</p> <p>Teacher Guide: T89-T90, T91-T92, T93-T94, T95-T96, T97-T98, A35-A36</p>

STANDARDS	PAGE REFERENCES
<p>D.RE.04.02 Order a given set of data, find the median, and specify the range of values.</p> <p>G4-FP7C</p>	<p>Student Edition: 98-101, 105-107 Concepts and Skills R74 Extra Practice R7 H.O.T. Problems 101 Real-World Example 98, 105 Study Guide and Review 133</p> <p>Teacher Edition: A 101; ATS 99; M 92J; SGO 98B</p>
<p>D.RE.04.03 Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.</p> <p>G4-FP7C</p>	<p>Student Edition: 108-110, 112-114 Are You Ready 94 Example 108, 109 Extra Practice R8 Real-World Example 112, 113 Real-World Math 121 Start Smart 13 Study Guide and Review 135, 136</p> <p>Teacher Edition: AE 113; ATS 109, 113</p> <p>Impact Mathematics Grade 4 Student Edition: 91-92, 93-94, A34 Teacher Guide: T91-T92, T93-T94, A35-A36</p>