

# Everyday Mathematics®

## Correlation

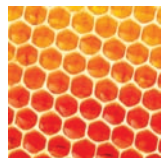
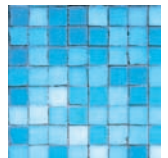
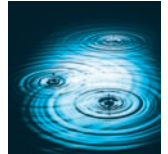
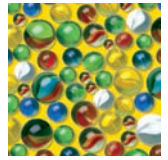
of the

## Lessons

to the

## Georgia Performance Standards

Grade 4



SETTING THE STANDARD

## CORRELATION TO THE GEORGIA PERFORMANCE STANDARDS

**Subject Area:** Mathematics

**Textbook Title:** Everyday Mathematics Grade 4

**Publisher:** Wright Group/McGraw-Hill

*The Georgia Performance Standards for grades K–8 Mathematics may be accessed on-line at: <http://www.georgiastandards.org/>.*

### Number and Operations

Students will further develop their understanding of whole numbers and master the four basic operations with whole numbers by solving problems. They will also understand rounding and when to use it appropriately. Students will add and subtract decimals and common fractions with common denominators.

<u>Standard</u>	<u>Standard</u>	<u>Where Taught</u>
<b>M4N1</b>	<b>Students will further develop their understanding of how whole numbers are represented in the base-ten numeration system.</b>	
M4N1 a.	Identify place value names and places from hundredths through one million.	<p><b>Teacher’s Lesson Guide:</b> 85–88, 94–105, 121, 133–134, 139, 238–243, 339, 345–346, 355–365, 374–377, 379–380, 635</p> <p><b>Student Reference Book:</b> 4, 10–12, 242, 252, 255, 267–269</p> <p><b>Math Journal:</b> 28, 32, 33, 36, 42, 43, 49, 50, 78, 126, 127, 130, 216</p> <p><b>Math Masters:</b> 39, 45, 47–50, 57, 58, 106, 107, 108, 163, 166, 172, 399–402, 487, 492, 493, 506</p> <p><b>5–Minute Math:</b> 2, 3, 7, 12, 14, 80, 89, 166</p>
M4N1 b.	Equate a number’s word name, its standard form, and its expanded form.	<p><b>Teacher’s Lesson Guide:</b> 89–91, 95–97, 101, 339, 357, 362, 379, 380</p> <p><b>Student Reference Book:</b> 4, 29</p> <p><b>Math Journal:</b> 30, 32, 33, 126, 130</p> <p><b>Math Masters:</b> 42, 45, 48–50, 107, 163, 166–168, 489</p> <p><b>5–Minute Math:</b> 12, 85, 171</p>
<b>M4N2</b>	<b>Students will understand and apply the concept of rounding numbers.</b>	
M4N2 a.	Round numbers to the nearest ten, hundred, or thousand.	<p><b>Teacher’s Lesson Guide:</b> 188, 336, 367–372, 701, 746</p> <p><b>Student Reference Book:</b> 182, 183</p>

		<p><b>Math Journal:</b> 42, 43, 132, 245</p> <p><b>Math Masters:</b> 57, 58, 147–149, 169–171</p> <p><b>5–Minute Math:</b> 15, 91, 92,</p>
M4N2 b.	Describe situations in which rounding numbers would be appropriate and determine whether to round to the nearest ten, hundred, or thousand.	<p><b>Teacher’s Lesson Guide:</b> 85, 119–124, 188, 367–372</p> <p><b>Student Reference Book:</b> 180, 182, 183</p> <p><b>Math Journal:</b> 42, 43, 132, 137, 147, 160</p> <p><b>Math Masters:</b> 57, 58, 148, 169, 171</p> <p><b>5–Minute Math:</b> 15, 91, 92</p>
M4N2 c.	Understand the meaning of rounding a decimal to the nearest whole number.	<p><b>Teacher’s Lesson Guide:</b> 746, 747, 749, 891, 932–933</p> <p><b>Student Reference Book:</b></p> <p><b>Math Journal:</b> 322, 342, 343</p> <p><b>Math Masters:</b> 288, 289, 291</p> <p><b>5–Minute Math:</b> 15, 91, 178</p>
M4N2 d.	Represent the results of computation as a rounded number when appropriate and estimate a sum or difference by rounding numbers.	<p><b>Teacher’s Lesson Guide:</b> 119–124, 125, 132–137, 380</p> <p><b>Student Reference Book:</b> 182–183</p> <p><b>Math Journal:</b> 42, 43, 49, 50, 55, 59, 62</p> <p><b>Math Masters:</b> 57, 58, 64, 65</p> <p><b>5–Minute Math</b></p>
<b>M4N3</b>	<b>Students will solve problems involving multiplication of 2–3 digit numbers by 1–2 digit numbers.</b>	<p><b>Teacher’s Lesson Guide:</b> 314–324, 331–354, 379, 380, 400–405</p> <p><b>Student Reference Book:</b> 18, 19, 233, 244, 245, 253, 259, 263</p> <p><b>Math Journal:</b> 106, 107, 115, 118, 122–124, 138, 139</p> <p><b>Math Masters:</b> 139, 140, 142, 148, 150–155, 157, 177, 432–434, 461, 488,</p> <p><b>5–Minute Math:</b> 19, 67, 71</p>

<b>M4N4</b>	<b>Students will further develop their understanding of division of whole numbers and divide in problem solving situations without calculators.</b>	
M4N4 a.	Know the division facts with understanding and fluency.	<p><b>Teacher’s Lesson Guide:</b> 180–185, 209–211, 215–218, 401–405, 411, 577–578, 916–917</p> <p><b>Student Reference Book:</b> 20, 21, 240, 244, 245</p> <p><b>Math Journal:</b> 56, 61, 69, 71, 73, 74, 106, 107, 189, 190, 312–313, Activity Sheets 1–4</p> <p><b>Math Masters:</b> 78, 85, 97, 99, 100, 177, 207, 208, 408, 409, 418, 454, 461, 470, 477–480</p> <p><b>5–Minute Math:</b> 10, 25, 86, 96, 97, 172</p>
M4N4 b.	Solve problems involving division by a 2–digit number (including those that generate a remainder).	<p><b>Teacher’s Lesson Guide:</b> 400–424, 455–459, 922, 923</p> <p><b>Student Reference Book:</b> 21–24</p> <p><b>Math Journal:</b> 149, 166, 167, 316, 317,</p> <p><b>Math Masters:</b> 197, 198, 342,</p> <p><b>5–Minute Math:</b> 25</p>

M4N4 c.	Understand the relationship between dividend, divisor, quotient, and remainder.	<p><b>Teacher’s Lesson Guide:</b> 181, 406–410, 419–424, 456–458, 461–462, 937</p> <p><b>Student Reference Book:</b> 22, 179, 235, 241, 264</p> <p><b>Math Journal:</b> 142, 143, 148, 149, 166, 167, 324</p> <p><b>Math Masters:</b> 178, 179, 182, 183, 197, 198, 353, 438, 471</p> <p><b>5–Minute Math:</b> 20, 25</p>
M4N4 d.	Understand and explain the effect on the quotient of multiplying or dividing both the divisor and dividend by the same number. ( $2050 \div 50$ yields the same answer as $205 \div 5$ ).	<p><b>Teacher’s Lesson Guide:</b> 408–411, 414</p> <p><b>Student Reference Book:</b> 17, 21, 233</p> <p><b>Math Journal:</b> 106, 107, 142, 143</p> <p><b>Math Masters:</b> 178, 179, 438, 461</p> <p><b>5–Minute Math:</b> 67</p>
<b>M4N5</b>	<b>Students will further develop their understanding of the meaning of decimals fractions and use them in computations.</b>	
M4N5 a.	Understand decimal fractions are part of the base–ten system.	<p><b>Teacher’s Lesson Guide:</b> 238–251, 261, 271–276, 295, 296, 610–613, 705</p> <p><b>Student Reference Book:</b> 26–36, 46</p> <p><b>Math Journal:</b> 80, 82, 94, 95, 203, 342, 343</p> <p><b>Math Masters:</b> 107–109, 111, 112, 117, 125–127, 226, 227, 399–402, 426–428, 458, 459, 506</p> <p><b>5–Minute Math:</b> 14, 89, 94, 102, 104</p>
M4N5 b.	Understand the relative size of numbers and order two digit decimal fractions.	<p><b>Teacher’s Lesson Guide:</b> 244–249, 250–253, 258, 271–276, 296</p> <p><b>Student Reference Book:</b> 27, 28, 30–33, 256, 316</p> <p><b>Math Journal:</b> 78, 80, 82, 83, 95</p> <p><b>Math Masters:</b> 106–108, 110–112, 119, 125–127, 426, 458, 459, 491, 506</p> <p><b>5–Minute Math:</b> 14, 89</p>
M4N5 c.	Add and subtract both one and two digit decimal fractions.	<p><b>Teacher’s Lesson Guide:</b> 255–259, 260–270, 295, 296</p> <p><b>Student Reference Book:</b> 26, 34–37</p> <p><b>Math Journal:</b> 85, 87, 90, 91</p>

		<p><b>Math Masters:</b> 113–115, 116–124</p> <p><b>5–Minute Math:</b> 14, 89, 94, 102, 104</p>
M4N5 d.	Model multiplication and division of decimal fractions by whole numbers.	<p><b>Teacher’s Lesson Guide:</b> 762–773, 775, 776</p> <p><b>Student Reference Book:</b> 39</p> <p><b>Math Journal:</b> 268–271</p> <p><b>Math Masters:</b> 296, 298, 404, 434</p> <p><b>5–Minute Math:</b> 102, 104, 186</p>
M4N5 e.	Multiply and divide both one and two digit decimal fractions by whole numbers.	<p><b>Teacher’s Lesson Guide:</b> 762–773, 928–934,</p> <p><b>Student Reference Book:</b> 39</p> <p><b>Math Journal:</b> 268–271, 320, 322</p> <p><b>Math Masters:</b> 296, 298, 345–348, 454</p> <p><b>5–Minute Math:</b> 186</p>
<b>M4N6</b>	<b>Students will further develop their understanding of the meaning of common fractions and use them in computations.</b>	
M4N6 a.	Understand representations of simple equivalent fractions.	<p><b>Teacher’s Lesson Guide:</b> 172, 572, 598–608, 611, 629–630, 640, 705, 723, 729, 732, 740, 745, 753, 775–776, 829–830</p> <p><b>Student Reference Book:</b> 48–52, 61, 62243</p> <p><b>Math Journal:</b> 185, 186, 194, 195, 201, 203, 211, 253, 261, 342, 343</p> <p><b>Math Masters:</b> 204, 205, 218–225, 233, 237, 262, 278, 281, 388, 389, 397, 426, 445, 473–476</p> <p><b>5–Minute Math:</b> 1, 11, 17, 79, 88, 165</p>
M4N6 b.	Add and subtract fractions and mixed numbers with common denominators. (Denominators should not exceed twelve.)	<p><b>Teacher’s Lesson Guide:</b> 584, 589, 592–597, 640, 706, 829–830</p> <p><b>Student Reference Book:</b> 48, 55–57</p> <p><b>Math Journal:</b> 198, 200</p> <p><b>Math Masters:</b> 216–218, 224, 231</p> <p><b>5–Minute Math:</b> 1, 26, 79, 98, 99, 101, 113, 165, 184</p>

M4N6 c.	Convert and use mixed numbers and improper fractions interchangeably.	<p><b>Teacher’s Lesson Guide:</b> 246, 247, 767</p> <p><b>Student Reference Book:</b> 46, 48</p> <p><b>Math Journal:</b></p> <p><b>Math Masters:</b> 216, 426</p> <p><b>5–Minute Math:</b> 1, 11, 17, 79, 88, 165, 174, 184</p> <p><b>3<sup>rd</sup> Grade:</b></p> <p><b>Teacher’s Lesson Guide:</b> 683–685, 686–687</p> <p><b>Math Journal:</b> 197, 198</p> <p><b>Math Masters:</b> 258, 259, 260, 261</p>
<b>M4N7</b>	<b>Students will explain and use properties of the four arithmetic operations to solve and check problems.</b>	
M4N7 a.	Describe situations in which the four operations may be used and the relationships among them.	<p><b>Teacher’s Lesson Guide:</b> 198–202, 359, 400–411, 824, 825, 830, 879, 880, 892, 943, 944</p> <p><b>Student Reference Book:</b> 238–240</p> <p><b>Math Journal:</b> 53, 59–61, 65, 66, 67, 138, 139, 142, 143</p> <p><b>Math Masters:</b> 86, 91, 163, 177, 178, 321, 470, 468, 469</p> <p><b>5–Minute Math:</b> 30–32, 100, 107, 189</p>
M4N7 b.	Compute using the order of operations, including parentheses.	<p><b>Teacher’s Lesson Guide:</b> 208–213, 462</p> <p><b>Student Reference Book:</b> 150, 151, 195</p> <p><b>Math Journal:</b> 71, 79, 84</p> <p><b>Math Masters:</b> 97, 98</p> <p><b>5–Minute Math:</b> 30–32, 77, 78, 106, 107, 163, 164, 193, 194</p>
M4N7 c.	Compute using the commutative, associative, and distributive properties.	<p><b>Teacher’s Lesson Guide:</b> 20, 21, 165, 166, 182–185, 219, 320–322, 324, 334, 343–348</p> <p><b>Student Reference Book:</b> 18, 150, 151, 156, 157, 240, 253</p> <p><b>Math Journal:</b> 56, 61, 122, 123</p>

		<p><b>Math Masters:</b> 85, 100, 142, 154, 418, 470, 488</p> <p><b>5–Minute Math:</b> 30, 31, 32, 77, 78, 106, 107, 163, 164</p>
M4N7 d.	Use mental math and estimation strategies to compute.	<p><b>Teacher’s Lesson Guide:</b> 268, 325–329, 331–336, 338, 339, 763–765, 770, 771, 776, 830</p> <p><b>Student Reference Book:</b> 184, 235, 248</p> <p><b>Math Journal:</b> 91, 113, 115, 118, 268, 270</p> <p><b>Math Masters:</b> 143, 144, 148, 296–299, 388, 389</p> <p><b>5–Minute Math:</b> 19, 95, 182</p>

## Measurement

Students will measure weight in appropriate metric and standard units. They will also measure angles.

<b>M4M1</b>	<b>Students will understand the concept of weight and how to measure it.</b>	
M4M1 a.	Use standard and metric units to measure the weight of objects.	<p><b>Teacher’s Lesson Guide:</b> 848–853, 857, 881, 886, 892</p> <p><b>Student Reference Book:</b> 126, 140, 315</p> <p><b>Math Journal:</b> 286, 287, 291, 303, 305</p> <p><b>Math Masters:</b> 269, 327, 448, 389</p> <p><b>5–Minute Math:</b> 48, 134, 216</p> <p><b>3<sup>rd</sup> Grade:</b>  <b>Teacher’s Lesson Guide:</b> 820–821, 824</p> <p><b>Student Reference Book:</b> 165</p> <p><b>Math Journal:</b></p> <p><b>Math Masters:</b> 330</p>
M4M1 b.	Know units used to measure weight (gram, kilogram, ounce, pound, and ton).	<p><b>Teacher’s Lesson Guide:</b> 848–853, 857, 881, 886, 892</p> <p><b>Student Reference Book:</b> 126, 140, 315</p> <p><b>Math Journal:</b> 286, 287, 291, 303, 305</p> <p><b>Math Masters:</b> 269, 327, 448</p> <p><b>5–Minute Math:</b> 48, 134, 216</p>
M4M1 c.	Compare one unit to another within a single system of measurement.	<p><b>Teacher’s Lesson Guide:</b> 850, 851, 881, 886</p> <p><b>Student Reference Book:</b> 127, 129, 140, 315</p> <p><b>Math Journal:</b> 303, 305</p> <p><b>Math Masters:</b></p> <p><b>5–Minute Math:</b> 48, 134,</p>
<b>M4M2</b>	<b>Students will understand the concept of angle and how to measure it.</b>	
M4M2 a.	Use tools, such as a protractor or angle ruler, and other methods, such as paper folding or drawing a diagonal in a square, to measure angles.	<p><b>Teacher’s Lesson Guide:</b> 425–428, 431–442, 830</p> <p><b>Student Reference Book:</b> 92, 93, 141–143, 230</p> <p><b>Math Journal:</b> 152, 153, 155, 157, 158</p>

		<p><b>Math Masters</b> 189–193, 457</p> <p><b>5–Minute Math</b> 53, 59, 142, 143, 222–225</p>
M4M2 b.	Understand the meaning and measure of a half rotation ( $180^\circ$ ) and a full rotation ( $360^\circ$ ).	<p><b>Teacher’s Lesson Guide:</b> 425–428, 432, 433, 438–440</p> <p><b>Student Reference Book:</b> 92, 141, 230</p> <p><b>Math Journal:</b> 152, 153, 157, 158</p> <p><b>Math Masters:</b> 189, 191, 192, 439</p> <p><b>5–Minute Math:</b> 53, 59, 142, 143, 222–225</p>

## Geometry

Students will understand and construct plane and solid geometric figures. They will also graph points on the coordinate plane.

<b>M4G1</b>	<b>Students will define and identify the characteristics of geometric figures through examination and construction.</b>	
M4G1 a.	Examine and compare angles in order to classify and identify triangles by their angles.	<p><b>Teacher’s Lesson Guide:</b> 45, 59, 61, 438, 442, 694</p> <p><b>Student Reference Book:</b> 92, 93, 97, 98</p> <p><b>Math Journal:</b> 6, 24, 25, 34, 223, 293</p> <p><b>Math Masters:</b> 11, 18, 19, 20, 23, 33, 206, 496, 497</p> <p><b>5–Minute Math:</b> 53, 59, 140, 142, 146, 222–225</p> <p>3<sup>rd</sup> Grade:            Teacher’s Lesson Guide: 422–423, 443            Student Reference Book: 106, 107            Math Masters: 174</p>
M4G1 b.	Describe parallel and perpendicular lines in plane geometric figures.	<p><b>Teacher’s Lesson Guide:</b> 32, 35–38, 40, 63, 64, 688, 692</p> <p><b>Student Reference Book:</b> 94, 95, 99, 100, 102, 114, 117, 118</p> <p><b>Math Journal:</b> 10, 11, 25, 34</p> <p><b>Math Masters:</b> 15, 16, 18, 19, 23</p> <p><b>5–Minute Math:</b> 56, 61, 64, 141, 228, 145</p>
M4G1 c.	Examine and classify quadrilaterals (including parallelograms, squares, rectangles, trapezoids, and rhombi).	<p><b>Teacher’s Lesson Guide:</b> 29–34, 35–39, 44–46, 50, 51, 60, 98, 688</p> <p><b>Student Reference Book:</b> 97, 99, 100, 258</p> <p><b>Math Journal:</b> 10, 25, 34</p> <p><b>Math Masters:</b> 11–15, 18–23, 29, 30, 496, 497</p> <p><b>5–Minute Math:</b> 56–57, 61, 64, 141, 145, 221,</p>

M4G1 d.	Compare and contrast the relationships among quadrilaterals.	<p><b>Teacher’s Lesson Guide:</b> 29–34, 36, 38, 39, 41–46, 50, 63, 64, 98, 139, 161</p> <p><b>Student Reference Book:</b> 97, 99, 100, 258</p> <p><b>Math Journal:</b> 11, 12, 34, 54</p> <p><b>Math Masters:</b> 11, 12, 14, 15, 18–23, 390, 496, 497</p> <p><b>5–Minute Math:</b> 56, 57, 61, 64, 141, 145, 221</p>
<b>M4G2 Students will understand fundamental solid figures.</b>		
M4G2 a.	Compare and contrast a cube and a rectangular prism in terms of the number and shape of their faces, edges, and vertices.	<p><b>Teacher’s Lesson Guide:</b> 854–859, 860–864, 874</p> <p><b>Student Reference Book:</b> 101, 102</p> <p><b>Math Journal:</b> 289, 290, 300–302</p> <p><b>Math Masters:</b> 328, 329, 390</p> <p><b>5–Minute Math:</b> 147, 229</p>
M4G2 b.	Describe parallel and perpendicular lines and planes in connection with the rectangular prism.	<p><b>Teacher’s Lesson Guide:</b> 855–857, 861, 874</p> <p><b>Student Reference Book:</b> 101, 102</p> <p><b>Math Journal:</b> 289, 290, 294, 295</p> <p><b>Math Masters:</b></p> <p><b>5–Minute Math:</b> 147, 229</p> <p><b>3rd Grade:</b> <b>Teacher’s Lesson Guide:</b> 469–470,</p> <p><b>Student Reference Book:</b> 115</p> <p><b>Math Journal:</b> 153</p>

M4G2 c.	Construct/collect models for solid geometric figures (cube, prisms, cylinder, etc.).	<b>Teacher’s Lesson Guide:</b> 854–859, 863–865, 874 <b>Student Reference Book:</b> 101–103 <b>Math Journal:</b> 289, 290, 293–295 <b>Math Masters:</b> 328, 329 <b>5–Minute Math:</b> 58, 229
<b>M4G3 Students will use the coordinate system.</b>		
M4G3 a.	Understand and apply ordered pairs in the first quadrant of the coordinate system.	<b>Teacher’s Lesson Guide:</b> 443– 454, 461–462, 619 <b>Student Reference Book:</b> 144, 257 <b>Math Journal:</b> 161–163, 164 <b>Math Masters:</b> 194, 486, 494 <b>5–Minute Math:</b> 148, 227
M4G3 b.	Locate a point in the first quadrant in the coordinate plane and name the ordered pair.	<b>Teacher’s Lesson Guide:</b> 443–454, 619 <b>Student Reference Book:</b> 144, 257 <b>Math Journal:</b> 161, 164 <b>Math Masters:</b> 185, 194, 486, 494 <b>5–Minute Math:</b> 148, 227
M4G3 c.	Graph ordered pairs in the first quadrant.	<b>Teacher’s Lesson Guide:</b> 443–454, 462, 619, 640 <b>Student Reference Book:</b> 144, 257 <b>Math Journal:</b> 161–164 <b>Math Masters:</b> 185, 194–196, 486, 494 <b>5–Minute Math:</b> 148, 227

**Algebra**

Students will investigate and represent mathematical relationships between quantities using mathematical expressions in problem–solving situations.

<b>M4A1</b>	<b>Students will represent and interpret mathematical relationships in quantitative expressions.</b>	
M4A1 a.	Understand and apply patterns and rules to	<b>Teacher’s Lesson Guide:</b> 158–168, 296, 316, 317, 350–353, 600, 604, 605, 682,

	describe relationships and solve problems.	683, 874, 875, <b>Student Reference Book:</b> 16, 158, 159 <b>Math Journal:</b> 53, 56, 106, 107, 124, 201, 284, 300, 301, 342, 343 <b>Math Masters:</b> 40, 50, 72–77, 101, 229, 393, <b>5–Minute Math:</b> 1, 17, 68–70, 79, 159, 160, 162, 165, 243, 244
M4A1 b.	Represent unknowns using symbols, such as $\Delta$ .	<b>Teacher’s Lesson Guide:</b> 105, 159–162, 214–219, 695–696, 873—875 <b>Student Reference Book:</b> 148, 150, 152, 154–157, 162–165 <b>Math Journal:</b> 53, 73, 74, 298, 301 <b>Math Masters:</b> 44, 72–74, 82, 101, 407, 424, 425 <b>5–Minute Math:</b> 70, 71, 73, 150, 152, 236, 237
M4A1 c.	Write and evaluate mathematical expressions using symbols and different values.	<b>Teacher’s Lesson Guide:</b> 203–207, 210–219, 222, 296, 682–686, 695–698, 874–875 <b>Student Reference Book:</b> 148, 150, 154, 155, 260, 261 <b>Math Journal:</b> 69, 71, 73, 74, 232, 233, 241, 300–301 <b>Math Masters:</b> 42, 73, 74, 76, 94, 96–98, 266, 424, 425, 498–502 <b>5–Minute Math:</b> 66, 69, 152, 235–237

### Data Analysis

Students will gather, organize, and display data. They will also compare features of graphs.

<b>M4D1</b>	<b>Students will gather, organize, and display data according to the situation and compare related features.</b>	
M4D1 a.	Represent data in bar, line and pictographs.	<b>Teacher’s Lesson Guide:</b> 126–131, 177–179, 755, 913, 919, 924, 938 <b>Student Reference Book:</b> 70–72, 75–79, 298 <b>Math Journal:</b> 47, 318 <b>Math Masters:</b> 62, 83, 414–417 <b>5–Minute Math:</b> 114, 122
M4D1 b.	Investigate the features and tendencies of graphs.	<b>Teacher’s Lesson Guide:</b> 108–110, 111–118, 128, 140, 176, 910–911, 938 <b>Student Reference Book:</b> 73–76, 79 <b>Math Journal:</b> 38, 40, 46, 265 <b>Math Masters:</b> 51–54, 56, 61–63, 81, 83, 84, 280, 295, 340, 389, 416, 417 <b>5–Minute Math:</b> 34, 37–41, 114, 116, 117, 119, 120, 122, 198, 200, 203, 204
M4D1 c.	Compare different graphical representations for a given set of data.	<b>Teacher’s Lesson Guide:</b> 128, 757–760, 761, 913 <b>Student Reference Book :</b> 71 <b>Math Journal:</b> 264, 265 <b>Math Masters:</b> 54 <b>5–Minute Math</b>
M4D1 d.	Identify missing information and duplications in data.	<b>Teacher’s Lesson Guide</b> 751–753 <b>Student Reference Book</b> <b>Math Journal</b> 261 <b>Math Masters</b> <b>5–Minute Math</b>

### Process Skills

Students will apply mathematical concepts and skills in the context of authentic problems and will understand concepts rather than merely following a sequence of procedures. Students will use the process standards as a way of acquiring and using content knowledge.

<b>M4P1</b>	<b>Students will solve problems (using appropriate technology).</b>
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M4P1 a.	Build new mathematical knowledge through problem solving.	<p><b>Teacher’s Lesson Guide:</b> 125, 202, 222, 400–411, 914–930, 943, 944</p> <p><b>Student Reference Book:</b> 178</p> <p><b>Math Journal:</b> 73, 138, 139, 142, 143, 312, 313, 316, 317, 320, 326</p> <p><b>Math Masters:</b> 50, 93, 177, 178, 341–345, 352, 423, 436, 454</p> <p><b>5–Minute Math:</b> 105</p>
M4P1 b.	Solve problems that arise in mathematics and in other contexts.	<p><b>Teacher’s Lesson Guide:</b> 198–201, 412–417, 422–424, 886, 929–935</p> <p><b>Student Reference Book:</b> 175–177, 179</p> <p><b>Math Journal:</b> 66, 67, 144, 145, 148, 149, 305, 320, 322</p> <p><b>Math Masters:</b> 91–93, 180, 184, 345–351, 388, 422, 423, 454</p> <p><b>5–Minute Math:</b> 27, 29, 105, 109, 191, 192</p>
M4P1 c.	Apply and adapt a variety of appropriate strategies to solve problems.	<p><b>Teacher’s Lesson Guide:</b> 198–202, 400–405, 462</p> <p><b>Student Reference Book:</b> 138, 139</p> <p><b>Math Journal:</b> 66, 67, 177, 313</p> <p><b>Math Masters:</b> 87, 91, 92</p> <p><b>5–Minute Math:</b></p>

M4P1 d.	Monitor and reflect on the process of mathematical problem solving.	<p><b>Teacher’s Lesson Guide</b> 412–417, 455–459, 462</p> <p><b>Student Reference Book</b></p> <p><b>Math Journal</b> 144, 145, 166, 167</p> <p><b>Math Masters</b> 180, 197</p> <p><b>5–Minute Math</b></p>
<b>M4P2</b>	<p><b>Students will reason and evaluate mathematical arguments.</b></p> <p>a. Recognize reasoning and proof as fundamental aspects of mathematics.</p> <p>b. Make and investigate mathematical conjectures.</p> <p>c. Develop and evaluate mathematical arguments and proofs.</p> <p>Select and use various types of reasoning and methods of proof.</p>	<p><b>Teacher’s Lesson Guide:</b> 119–121, 134, 189, 259, 283–288, 627–630, 633–635, 639, 640, 700, 701, 705, 706, 795, 796, 800–802, 806, 807, 811, 812, 817, 818</p> <p><b>Student Reference Book:</b> 108, 180–184</p> <p><b>Math Journal:</b> 42, 43, 49, 50, 99, 211, 213–215, 233, 238, 245, 276, 279, 281, 304–306, 308, 309, 311–314, 318, 389</p> <p><b>Math Masters:</b> 57, 58, 64, 65, 114, 115</p> <p><b>5–Minute Math:</b> 19, 95, 149, 162, 182</p>
<b>M4P3</b>	<p><b>Students will communicate mathematically.</b></p> <p>a. Organize and consolidate their mathematical thinking through communication.</p> <p>b. Communicate their mathematical thinking coherently and clearly to peers, teachers, and others.</p> <p>c. Analyze and evaluate the mathematical thinking and strategies of others.</p> <p>d. Use the language of mathematics to express mathematical ideas precisely.</p>	<p><b>Teacher’s Lesson Guide:</b> 27, 28, 33, 38, 723–725, 824, 825, 879, 880, 914–919</p> <p><b>Student Reference Book:</b> 238–240, 267–269, 271, 294–296, 300</p> <p><b>Math Journal:</b> 11, 12, 248–250, 313</p> <p><b>Math Masters:</b> 7, 8, 24, 179, 262, 321, 340, 468, 469</p> <p><b>5–Minute Math:</b> 8, 9, 36, 37, 56, 57, 145, 146, 207, 220</p>
<b>M4P4</b>	<p><b>Students will make connections among mathematical ideas and to other disciplines.</b></p> <p>a. Recognize and use connections among mathematical ideas.</p> <p>b. Understand how mathematical ideas interconnect and build on one another to produce a coherent whole.</p> <p>c. Recognize and apply mathematics in contexts outside of mathematics.</p>	<p><b>Teacher’s Lesson Guide:</b> 82–88, 186–191, 278, 292, 327, 328, 332, 333, 374–376, 931–935</p> <p><b>Student Reference Book:</b> 267–295, 304, 309</p> <p><b>Math Journal:</b> 28, 101–103, 112–114, 134, 171–181</p> <p><b>Math Masters:</b> 147, 419–421, 426, 503</p> <p><b>5–Minute Math</b></p>
<b>M4P5</b>	<p><b>Students will represent mathematics in multiple ways.</b></p> <p>a. Create and use representations to</p>	<p><b>Teacher’s Lesson Guide:</b> 24–26, 48–49, 53–5, 58–59, 61, 63–64, 193–195, 204–207, 284–287, 400–411, 572–575, 577–580, 588–596, 617, 618, 622–623, 639, 640, 659–663, 665–668, 671–672, 705, 706, 730, 795–798, 800–802, 806–807,</p>

	<p>organize, record, and communicate mathematical ideas.</p> <p>b. Select, apply, and translate among mathematical representations to solve problems.</p> <p>c. Use representations to model and interpret physical, social, and mathematical phenomena.</p>	<p>811–812, 817–818, 830, 868–870, 873–875, 910–911</p> <p><b>Student Reference Book:</b> 108, 109, 114, 117, 118, 130, 244, 245</p> <p><b>Math Journal:</b> 4, 14, 17–19, 21–24, 64, 69, 98, 99, 138, 139, 142, 143, 185, 186, 187, 189, 190, 194, 195, 196, 198, 205, 206, 208, 209, 219, 220, 221, 222, 224, 225, 230, 231, 252, 253, 274, 276, 279, 281, 300–302, 309, 342, 343</p> <p><b>Math Masters:</b> 8, 24–30, 32, 33, 94, 95, 131, 177, 179, 204, 205, 248, 249, 252–254, 308, 317, 319, 330, 332, 388, 389, 437, 444, 477–480, 212, 213, 235, 236, 304–305, 306, 309, 311–314, 403, 443</p> <p><b>5–Minute Math:</b> 50, 54, 55, 60, 149</p>
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