



MathMatters 1

An Integrated Program

Course 1 © 2006

STANDARDS	PAGE REFERENCES
<p><u>Standard 1: Number and Operation</u></p>	
<p>Students in Grade 8 read, write, compare, order, and place on a number line rational numbers, including integers, fractions, decimals, and percents, and absolute values. Students use rational numbers, including percents and ratios, and π (pi) to solve problems. Students convert between standard form, scientific notation, and exponential form. Students add, subtract, multiply, and divide rational numbers and students recall the common equivalent fractions, decimals, and percents of halves, thirds, fourths, fifths, and tenths. Students evaluate numerical expressions with rational numbers using the order of operations and students evaluate numerical expressions with whole number exponents. Students estimate to predict computation results.</p>	
<p>Goal 1.1: Understand and use numbers.</p>	
<p>Objective(s): By the end of Grade 8, the student will be able to:</p>	
<p>8.M.1.1.1 Compare magnitudes and relative magnitudes of rational numbers, including integers, fractions, decimals, percents, and absolute values. (337.01.a)</p>	<p>Student Edition: 104, 118 <i>Are You Ready?</i> 103 #19-#30, 206 #13-#20, 240-243</p> <p>Annotated Teacher's Edition: 5MW 118, 240; CE 103 Ordering Real Numbers, 241; DI 240; EL 241; TT 207</p>

STANDARDS	PAGE REFERENCES
8.M.1.1.2 Use rational numbers, including percents and ratios, and π (pi) to solve problems. (337.01.b)	Student Edition: 80-87, 104-111, 114-117, 124-127, 260-263, 270-277, 290-293 <i>Are You Ready?</i> 4 #1-#16, 5, 50-51 #7-#22 <i>Review and Practice Your Skills</i> 130-131 Annotated Teacher's Edition: CE 81, 115, 125; EL 10
8.M.1.1.3 Locate the position of rational numbers and positive real numbers on a number line. (337.01.e)	Student Edition: 104, 106 #1-#4, #16-#33, 118, 240-243 Annotated Teacher's Edition: CE 105, 241; DI 240; EL 241
8.M.1.1.4 Convert between standard form, scientific notation, and exponential form. (337.01.c)	Student Edition: 132-135 <i>Chapter Review</i> 148 #54 <i>Review and Practice Your Skills</i> 140 #19-#32, 141 #103-#112 Annotated Teacher's Edition: CE 133, 140 Lesson 3-7; EL 133; TT 134
8.M.1.1.5 Apply number theory concepts (primes, composites, prime factorization, LCM, GCF). (337.01.d)	Student Edition: 414-417 <i>Are You Ready?</i> 393 #15-#28 <i>Chapter Review</i> 428 Lesson 9-5 <i>Review and Practice Your Skills</i> 422 #1-#12 Annotated Teacher's Edition: CE 393; GCF 415; LW 416; TT 392, 414
8.M.1.1.6 Recognize pertinent information for problem solving. (338.01.b)	Student Edition: 72-73, 128-129, 170-171, 238-239, 294-295, 306-307, 366-367, 424-425, 502-503 <i>Are You Ready?</i> 5 <i>Chapter Investigation</i> 101, 153, 257
8.M.1.1.7 Apply integers in one- and two-step common real-world situations.	Student Edition: 12 #23-#27, 69 #29, 72-73, 117 #63, 177 #38-#39, 197 #26-#29, 248 #31-#32, 262-263 #40-#43, 270-273, 274-277, 280-283, 284-287, 453 #36-#42, 485 #16-#17 Annotated Teacher's Edition: CE 73

STANDARDS	PAGE REFERENCES
8.M.1.1.8 Use appropriate vocabulary.	Student Edition: 82 #14, 92 #8, 116 #44, 197 #24, 225 #46, 234 #9, 242 #9, 248 #9, 262 #13, 277 #46, 293 #37, 337 #37, 354 #23, 364 #19 <i>Chapter Review</i> 426 Vocabulary Annotated Teacher's Edition: AA 75
Goal 1.2: Perform computations accurately.	
Objective(s): By the end of Grade 8, the student will be able to:	
8.M.1.2.1 Recall the common equivalent fractions, decimals, and percents of halves, thirds, fourths, fifths, and tenths. (337.02.b)	Student Edition: <i>Are You Ready?</i> 258 #15-#16 <i>Estimation Tip</i> 261 <i>Mental Math</i> 264 Annotated Teacher's Edition: 5MW 260
8.M.1.2.2 Add, subtract, multiply, and divide rational numbers. (337.02.a)	Student Edition: 108-111, 114-117, 119 <i>Are You Ready?</i> 5 #25-#32, 206-207 <i>Prerequisite Skills</i> 537, 541 Annotated Teacher's Edition: CE 5, 109; EL 109
8.M.1.2.3 Evaluate numerical expressions with whole number exponents. (337.02.d)	Student Edition: 136-139, 142-145, 394-397, 398-401, 404-407, 408-411, 418-421 <i>Review and Practice Your Skills</i> 140, 141, 402, 403 Annotated Teacher's Edition: 5MW 136, 142, 398, 408; CE 395, 399, 405, 409; DI 399; EL 401
8.M.1.2.4 Evaluate numerical expressions with rational numbers using the order of operations. (337.02.c)	Student Edition: 114-117, 222 Example 2 <i>Are You Ready?</i> 207 #37-#42 <i>Review and Practice Your Skills</i> 122 #1-#29 Annotated Teacher's Edition: AA 115; CE 115; LW 116

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8.M.1.2.5	Select and use an appropriate method of computation from mental math, paper and pencil, calculator, or a combination of the three. (337.02.e)	<p>Student Edition: 84-87, 143-145, 223, 280-283, 335 Example 2 <i>Assessment</i> 149 #48-#55 <i>Review</i> 148 Lesson 3-9, 297-298 Lesson 6-5 <i>Review And Practice Your Skills</i> 288 #1-#15</p> <p>Annotated Teacher's Edition: CE 281, 288, EL 281, 295; I 280; LW 282</p>
8.M.1.2.6	Use a variety of strategies including common mathematical formulas to compute problems drawn from real life situations. (338.01.a)	<p>Student Edition: 12 #23-#27, 69 #29, 72-73, 117 #63, 177 #38-#39, 197 #26-#29, 248 #31-#32, 262-263 #40-#43, 270-273, 274-277, 280-283, 284-287, 453 #36-#42, 485 #16-#17</p> <p>Annotated Teacher's Edition: CE 73</p>
8.M.1.2.7	Use appropriate vocabulary and notations. (337.02.f)	<p>Student Edition: 116 #48-#53, 121 #49, 134 #13, 158 #12, 162 #8, 169 #27, 186 #10, 187 #40, 224 #13, 225 #44, 225 #46, 234 #9, 242 #9, 249 #40, 277 #46, 310 #15</p>
<p>Goal 1.3: Estimate and judge reasonableness of results.</p>		
<p>Objective(s): By the end of Grade 8, the student will be able to:</p>		
8.M.1.3.1	Estimate to predict computation results. (337.03.a)	<p>Student Edition: 502-503 <i>Five-Step Plan</i> 73, 129, 239, 295, 307 <i>Problem Solving</i> 5 <i>Review and Practice Your Skills</i> 504 #8-#12</p> <p>Annotated Teacher's Edition: CE 503; EL 503; LW 503</p>
8.M.1.3.2	Identify when estimation is appropriate and apply to problem solving situations. (337.03.b)	<p>Student Edition: 52 #1-#2, 54 #34-#35 <i>MathWorks</i> 61 #2</p> <p>Annotated Teacher's Edition: TT 267</p>
8.M.1.3.3	Identify whether a given estimate is an overestimate or underestimate. (337.03.c)	<p>Student Edition: 52-55, 63 Example 3, 64 #25-#28 <i>MathWorks</i> 61</p> <p>Annotated Teacher's Edition: CE 53; I 52; LW 54; TT 267</p>

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8.M.1.3.4	Use a four-function calculator to solve complex grade-level problems.	<p>Student Edition: 12 #28, 107 #49, 111 #50, 116 #39-#41, 120 #3-#4, 135 #60-#62, 144 #13-#16, 220 #37-#39 <i>Technology Note</i> 105, 115, 137</p> <p>Annotated Teacher's Edition: CE 335; I 142; TT 142</p>
8.M.1.3.5	Formulate conjectures and justify (short of formal proof) why they must be or seem to be true. (338.02.c)	<p>Student Edition: 191 #31, 482-485, 488-491</p> <p>Annotated Teacher's Edition: CE 483, 486, 489; EL 484</p>
8.M.1.3.6	Use appropriate vocabulary and notations. (337.03.d)	<p>Student Edition: 121 #49, 134 #13, 158 #12, 162 #8, 169 #27, 186 #10, 187 #40, 214 #43, 224 #13, 225 #44, 225 #46, 234 #9, 242 #9, 249 #40, 277 #46, 310 #15</p>
<p>Standard 2: Concepts and Principles of Measurement</p> <p>Students in Grade 8 select and use appropriate units and tools to make formal measurements in both systems. Students apply given formulas for perimeter, circumference, and area of triangles, circles, and quadrilaterals, and the volume and surface area of rectangular prisms. Students solve problems involving area of circles and the perimeter and area of rectangles and triangles. Students use rates, proportions, ratios, and map scales in problem solving situations.</p> <p>Goal 2.1: Understand and use U.S. customary and metric measurements.</p> <p>Objective(s): By the end of Grade 8, the student will be able to:</p>		
8.M.2.1.1	Select and use appropriate units and tools to make formal measurements in both systems. (339.01.a)	<p>Student Edition: 144 Example 3, #17, 159 #51, 184-187, 336 #35-#36, 506 Example 1 <i>MathWorks</i> 165, 183</p>
8.M.2.1.2	Apply estimation of measurement to real-world and content problems using standard measuring devices. (339.01.b)	<p>Student Edition: 55 #40, #42, 63 Example 3, 64 #25-#28, 76 #50-#53, 77 #59-#60, 90-93 <i>Review and Practice Your Skills</i> 70 #13-#18</p> <p>Annotated Teacher's Edition: CE 63 Example 3, 91; EL 91</p>
8.M.2.1.3	Compare the differences and relationships among measures of perimeter, area, and volume (capacity) within both systems. (339.01.c)	<p>Student Edition: 184, 187 #32, 196 #22 <i>MathWorks</i> 183</p> <p>Annotated Teacher's Edition: CE 189 Example 3; EL 184, 189; I 188; MW 183</p>

STANDARDS		PAGE REFERENCES
8.M.2.1.4	Given the formulas, find the circumference, perimeter, or area of triangles, circles, and quadrilaterals, and the volume and surface area of rectangular prisms. (341.01.e)	<p>Student Edition: 169 #34-#36, 184-187, 188-191, 194-197, 290-293, 317 #39-#42 <i>MathWorks</i> 217</p> <p>Annotated Teacher's Edition: AA 185; CE 185, 189</p>
8.M.2.1.5	Convert units of measurement within each system in problem solving situations. (339.01.e)	<p>Student Edition: 56-58 <i>Review and Practice Your Skills</i> 60 #23-#54</p> <p>Annotated Teacher's Edition: CE 57; DI 56, 58; E 52, 56; EL 57; LW 58</p>
8.M.2.1.6	Solve problems involving area of circles and the perimeter and area of rectangles and triangles. (339.01.d)	<p>Student Edition: 62-65, 66-69, 72-73, 80-83 <i>Review and Practice Your Skills</i> 70, 88</p> <p>Annotated Teacher Edition: 5MW 90; AA 62, 67; CE 62, 67, 73, 81; EL 81</p>
8.M.2.1.7	Use appropriate vocabulary and notations. (339.01.f)	<p>Student Edition: 54 #34, 65 #41, 77 #64, 156-159, 181 #20, 191 #32, 397 #63-#65</p> <p>Annotated Teacher's Edition: EL 91, 157; LW 158</p>
Goal 2.2: Apply the concepts of rates, ratios, and proportions.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.2.2.1	Use rates, proportions, ratios, and map scales in problem-solving situations. (339.03.a)	<p>Student Edition: 84-87, 223 Example 3, 260-263 <i>Review and Practice Your Skills</i> 88 #25-#54</p> <p>Annotated Teacher's Edition: CE 85</p>
8.M.2.2.2	Determine unit rates in real-world situations.	<p>Student Edition: 201 Example 2, 280, 314 #1-#3, 316 #11, 321 #31-#32, 327 #41, 340 #12 <i>MathWorks</i> 331 #6-#7, 333 #6</p> <p>Annotated Teacher's Edition: CE 281 Supplementary Example 4, 319; LW 320</p>

STANDARDS		PAGE REFERENCES
Goal 2.3: Apply dimensional analysis.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.2.3.1	Illustrate the interrelationship of measurement units through dimensional analysis conversions. (339.04.a)	Student Edition: 59 #62, 76 #50-#53, 77 #59-#60, 84-87, 96, 171 #8 <i>MathWorks</i> 79 <i>Working Together</i> 49 Annotated Teacher's Edition: CE 85; CI 49
Standard 3: Concepts and Language of Algebra and Functions		
Students in Grade 8 translate simple word statements and story problems into algebraic expressions and equations. Students use the order of operations in evaluating basic algebraic expressions and students solve one- and two-step equations and inequalities. Students represent a set of data in a table, as a graph, and as a mathematical relationship.		
Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.3.1.1	Use variables in expressions, equations, and inequalities. (340.01.a)	Student Edition: 128-129, 320 Example 4, 321 #39, 337 #45 <i>MathWorks</i> 131, 505 Annotated Teacher's Edition: CE 129; EL 129; MW 131, 505; TT 128
8.M.3.1.2	Translate simple word statements and story problems into algebraic expressions and equations. (340.01.b)	Student Edition: 209 Example 3, 213 Example 3, 265 Example 4, 271 Example 2, 274 Example 1, 285 Example 3, 291 Example 3 <i>Are You Ready?</i> 258 #17-#26, 259 #27-#34 Annotated Teacher's Edition: CE 261 Example 4; TT 270
8.M.3.1.3	Use symbols "<," ">," "=", "≠," "≤," and "≥" to express relationships. (340.01.c)	Student Edition: 77 #54, 224-225, 240 Annotated Teacher's Edition: 5MW 240, 246; CE 241; DI 240; TT 248

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Goal 3.2: Evaluate algebraic expressions.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.3.2.1	Use and apply the following properties in evaluating algebraic expressions: commutative, associative, identity, zero, inverse, distributive, and substitution. (340.02.a)	<p>Student Edition: 105, 119, 120 #5-#10, #22-#27, 408 Example 1 <i>Are You Ready?</i> 206 #7-#12, 393 #29-#34 <i>Review and Practice Your Skills</i> 122 #38-#46, 123 #82-#87</p> <p>Annotated Teacher's Edition: CE 119 Example 2, Example 4; DI 118; FG 123; TT 206, 393, 408</p>
8.M.3.2.2	Use the order of operations in evaluating simple algebraic expressions. (340.02.b)	<p>Student Edition: 114-117, 222 Example 2 <i>Are You Ready?</i> 207 #37-#42 <i>Review and Practice Your Skills</i> 122 #1-#29</p> <p>Annotated Teacher's Edition: AA 115; CE 115; LW 116</p>
8.M.3.2.3	Simplify algebraic expressions. (340.02.c)	<p>Student Edition: 394-397, 398-401, 404-407, 408-411, 418-421 <i>Practice</i> 402, 403</p> <p>Annotated Teacher's Edition: 5MW 398, 408; CE 395, 399, 405, 409; DI 399; EL 401</p>
Goal 3.3: Solve algebraic equations and inequalities.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.3.3.1	Solve one- and two-step equations and inequalities. (340.03.a)	<p>Student Edition: 318-321, 324-327, 328-331, 334, 339-341 <i>MathWorks</i> 333 <i>Review and Practice Your Skills</i> 332</p> <p>Annotated Teacher's Edition: CE 339</p>
8.M.3.3.2	Match graphical representations with simple linear equations. (340.03.b)	<p>Student Edition: 208, 209 Example 3, 210 #49, 213 Example 3, 219 Example 4, 230 #52-#53, 231 #60-#62, 320 Example 4, 321 #31-#32</p> <p>Annotated Teacher's Edition: CE 213, 241; DI 219</p>

STANDARDS		PAGE REFERENCES
Goal 3.4: Understand the concept of functions.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.3.4.1	Extend patterns and identify a rule (function) that generates the pattern using rational numbers. (343.01.a)	Student Edition: 128-129, 141 #93-#94, 147 #49-#51, 151 #19 <i>Review and Practice Your Skills</i> 130 Lesson 3-6, 131 #61-#62 Annotated Teacher's Edition: 5MW 128; ETL 129; GS 128; QA 129; TT 128
8.M.3.4.2	Use relationships to explain how a change in one quantity may result in a change in another, and identify the relationship as a positive, negative, or neither. (343.01.b)	Student Edition: 318-321 Annotated Teacher's Edition: 5MW 314; CE 315 Supplementary Example 4, 319; EL 327; FG 315, 316; LW 320
8.M.3.4.3	Use appropriate vocabulary and notations. (343.01.c)	Student Edition: 116 #39, #41, 132-135, 144 #13-#16 <i>Chapter Review</i> 148 #54 <i>Review and Practice Your Skills</i> 140 #19-#32, 141 #103-#112
Goal 3.5: Represent equations, inequalities and functions in a variety of formats.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.3.5.1	Represent a set of data in a table, as a graph, and as a mathematical relationship. (343.02.a)	Student Edition: 6-9, 16-19, 20-23, 24-27, 28-31, 34-37, 38-41 <i>Review</i> 43-44 Annotated Teacher's Edition: CE 25, 35, 39; EL 24
Goal 3.6: Apply functions to a variety of problems.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.3.6.1	Use patterns and linear functions to represent and solve problems. (343.03.a)	Student Edition: 314, 317 #33, 318, 321 #33, 331 #26-#30, 340 Example 3 Annotated Teacher's Edition: CE 315 Example 4, 319 Example 4

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Standard 4: Concepts and Principles of Geometry

Students in Grade 8 describe and classify relationships among types of one-, two-, and three-dimensional geometric figures using their defining properties. Students apply the fundamental concepts, properties, and relationships among points, lines, rays, planes, angles, and shapes. Students identify and apply congruence, similarities, and line symmetry of shapes.

Goal 4.1: Apply concepts of size, shape, and spatial relationships.

Objective(s): By the end of Grade 8, the student will be able to:

<p>8.M.4.1.1 Describe and classify relationships among types of one-, two-, and three-dimensional geometric figures, using their defining properties. (341.01.a)</p>	<p>Student Edition: 156, 158 #5-#12, 160-161, 166-169 <i>Are You Ready?</i> 154 Annotated Teacher's Edition: 5MW 156; AA 161; CE 167</p>
<p>8.M.4.1.2 Draw and measure various angles and shapes using appropriate tools. (341.01.b)</p>	<p>Student Edition: 353-355 <i>Are You Ready?</i> 351 #15-#20 <i>MathWorks</i> 361 #1-#2 <i>Mid-Chapter Quiz</i> 369 #1-#5 <i>Review and Practice Your Skills</i> 360 #1-#3, #13-#15 Annotated Teacher's Edition: CE 351 #5-#6, 353</p>
<p>8.M.4.1.3 Apply the fundamental concepts, properties, and relationships among points, lines, rays, planes, and angles. (341.01.c)</p>	<p>Student Edition: 156-159, 160-163, 166-169, 178-181 <i>Review and Practice Your Skills</i> 164-165 Annotated Teacher's Edition: AA 161; CE 161, 167, 171; EL 167, 172</p>
<p>8.M.4.1.4 Identify and model the effects of reflections, translations, rotations, and scaling on various shapes. (341.01.g)</p>	<p>Student Edition: 84-87, 370-373, 374-375, 380-383 <i>Review</i> 385, 386 <i>Review and Practice Your Skills</i> 378, 379 Annotated Teacher's Edition: 5MW 370, 380; AA 374; CE 371, 375, 378, 381; QA 372</p>

STANDARDS		PAGE REFERENCES	
8.M.4.1.5	Identify congruence, similarities, and line symmetry of shapes. (341.01.d)	Student Edition: 82 #13, 85 Example 3–Example 4, 87 #43, 93 #21–#23, 171 #10, 177 #36, 179 Example 3, 187 #33, 190 #22, 197 #28–#29 <i>MathWorks</i> 183	Annotated Teacher’s Edition: CE 171
8.M.4.1.6	Explain the concept of surface area and volume (capacity). (341.01.f)	Student Edition: 184–187, 188–191, 194–197 <i>Review</i> 198–200	Annotated Teacher’s Edition: AA 185, 195; CE 185, 189, 195; EL 189
8.M.4.1.7	Use appropriate vocabulary and symbols. (341.01.h)	Student Edition: 52–55, 58 #17, #31, 63, 70–73, 91–93, 128–129, 320 Example 4, 321 #39, 337 #45 <i>MathWorks</i> 131, 505 <i>Review and Practice Your Skills</i> 130 #36–#44	Annotated Teacher’s Edition: CE 53, 60, 63, 91; LW 54
Goal 4.2: Apply the geometry of right triangles.			
No objectives at this grade level.			
Goal 4.3: Apply graphing in two dimensions.			
Objective(s): By the end of Grade 8, the student will be able to:			
8.M.4.3.1	Identify and plot points on a coordinate plane. (341.03.a)	Student Edition: 308–311 <i>Review and Practice Your Skills</i> 312 Lesson 7-2	Annotated Teacher’s Edition: CE 309; LW 310; TT 312

STANDARDS	PAGE REFERENCES
Standard 5: Data Analysis, Probability, and Statistics	
<p>Students in Grade 8 analyze and interpret tables, charts and graphs, including frequency tables, scatter plots, line graphs, line plots, bar graphs, histograms, circle graphs, and stem-and-leaf plots. Students collect, organize, and display data with appropriate notation in tables, charts, and graphs, including scatter plots, line graphs, line plots, bar graphs, histograms, and stem-and-leaf plots. Students choose and calculate the appropriate measure of central tendency – mean, median, and mode. Students recognize equally likely outcomes and make predictions based on experimental and theoretical probabilities.</p>	
Goal 5.1: Understand data analysis.	
Objective(s): By the end of Grade 8, the student will be able to:	
<p>8.M.5.1.1 Analyze and interpret tables, charts, and graphs, including frequency tables, scatter plots, broken line graphs, line plots, bar graphs, histograms, circle graphs, and stem-and-leaf plots. (342.01.a)</p>	<p>Student Edition: 6-9, 16-19, 20-23, 24-27, 28-31, 34-37, 38-41 Annotated Teacher’s Edition: CE 35; EL 24</p>
<p>8.M.5.1.2 Explain and justify conclusions drawn from tables, charts, and graphs. (342.01.b)</p>	<p>Student Edition: 20-21, 24-27, 28-31, 34-37 Annotated Teacher’s Edition: CE 21, 25, 29, 35</p>
<p>8.M.5.1.3 Use appropriate vocabulary and notations. (342.01.c)</p>	<p>Student Edition: 8 #16, 13 #47, 26 #15, 37 #27 Annotated Teacher’s Edition: DI 40; EL 7, 25, 39; LW 36</p>
Goal 5.2: Collect, organize, and display data.	
Objective(s): By the end of Grade 8, the student will be able to:	
<p>8.M.5.2.1 Collect, organize, and display data with appropriate notation in tables, charts, and graphs, including scatter plots, broken line graphs, line plots, bar graphs, histograms, and stem-and-leaf plots. (342.02.a)</p>	<p>Student Edition: 6-9, 449 #40, 453 #42, 467 #24 <i>Chapter Investigation</i> 433 <i>Review</i> 470 Annotated Teacher’s Edition: CE 7; LW 8</p>

STANDARDS		PAGE REFERENCES
Goal 5.3: Apply simple statistical measurements.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.5.3.1	Choose and calculate the appropriate measure of central tendency – mean, median, and mode. (342.03.a)	Student Edition: 10-13 <i>Chapter Review</i> 43 Lesson 1-2 Annotated Teacher's Edition: CE 11, 15; EL 10, 11; LW 12
8.M.5.3.2	Explain the significance of distribution of data, including range, frequency, gaps, and clusters. (342.03.b)	Student Edition: 10-13, 16, 17 #7, 19 #36 <i>Chapter Review</i> 43 Lesson 1-2 Annotated Teacher's Edition: CE 11, 15, 17 #b; EL 10, 11; LW 12
Goal 5.4: Understand basic concepts of probability.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.5.4.1	Model situations of probability using simulations. (342.04.a)	Student Edition: 440-441, 443 #30-#34 Annotated Teacher's Edition: AA 442; CE 441 Example 3; FG 440; TT 444, 446
8.M.5.4.2	Recognize equally likely outcomes. (342.01.c)	Student Edition: 436 Annotated Teacher's Edition: DI 437; FG 436
8.M.5.4.3	Explain that probability ranges from 0% to 100% and identify a situation as having high or low probability.	Student Edition: 436-437 Annotated Teacher's Edition: CE 437, 444 Lesson 10-2; EL 438; FG 436; TT 445
8.M.5.4.4	Use the language of probability. (342.04.b)	Student Edition: 436, 438 #13, 447 #8, 450, 456, 458 #31, 464 Annotated Teacher's Edition: CE 437; LW 438, 442, 458, 466
Goal 5.5: Make predictions or decisions based on data.		
Objective(s): By the end of Grade 8, the student will be able to:		
8.M.5.5.1	Make predictions based on experimental and theoretical probabilities. (342.05.a)	Student Edition: 440-443, 446-449, 450-453, 456-459, 460-461 Annotated Teacher's Edition: CE 441, 444, 447, 451, 457, 461; TT 444

STANDARDS	PAGE REFERENCES
8.M.5.5.2 Conduct statistical experiments and interpret results using tables, charts, or graphs. (342.05.c)	Student Edition: 433, 449 #40, 453 #42, 467 #24 <i>Review</i> 470 Annotated Teacher's Edition: AA 442; CI 433; EL 460, 466; FG 440; T 470
8.M.5.5.3 Use appropriate vocabulary and notations. (342.05.b)	Student Edition: 436, 438 #13, 447 #8, 450, 456, 458 #31, 464 Annotated Teacher's Edition: CE 437; LW 438, 442, 458, 466