



Mathematics

Applications and Concepts
Course 2
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STANDARDS		PAGE REFERENCES
Numbers, Number Sense, and Computation		
Content Standard 1.0: <i>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate, use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions.</i>		
By the end of Grade 7 , students know and are able to do everything required in the previous grades and:		
1.7.1 Read, write, and compute ratios ¹ and proportions ; read, write, add, subtract, multiply, and divide positive and negative numbers.	I/S	Student Edition: 106-108, 120-124, 128-131, 134-137, 138-141, 244-247, 248-251, 286, 288-291, 330 #5, 559, 560, 562-563 <i>Hands-On Lab</i> 301 <i>Spreadsheet Investigation</i> 309 <i>WebQuest</i> 3, 103 Teacher Wraparound Edition: A 300; DI 135, 249, 298; IE 245; PS 329
1.7.2 Apply positive and negative numbers, ratios, and proportions to solve mathematical and practical problems.	E/S	Student Edition: 106-108, 194, 216-219, 231 #56, 237 #19, 288-291, 297-300, 304-308, 323-325, 330 #5 <i>Hands-On Lab</i> 301 <i>WebQuest</i> 3, 103 Teacher Wraparound Edition: DI 289; PS 329

STANDARDS		PAGE REFERENCES
1.7.3 Use absolute value and the properties of real numbers including distributive, commutative , and associative to solve problems.	E/S	Student Edition: 30-33, 50 #6, 106-108, 124 #52-#57, 234 #4 <i>Study Tip</i> 198 Teacher Wraparound Edition: A 33; DI 106; IE 31, 107
1.7.6 Compare and order groups containing a mix of fractions, percents, and decimals (e.g., on a number line).	I/S	Student Edition: 227-231, 233, 234, 240, 556 <i>Problem-Solving Strategy</i> 302 Teacher Wraparound Edition: A 231; DI 228; PS 235
1.7.7 Select and round to the appropriate significant digit; estimate using a variety of methods.	E/S	Student Edition: 213 #44, #45, 240-243, 273 #26-#27, 282 #4, 283 #16, 367 #12, 542-545, 551 #20, 557, 558 <i>Problem-Solving Strategy</i> 252-253, 338-339 Teacher Wraparound Edition: A 545; DI 241, 543; PC 238F
1.7.9 Translate among fractions, decimals and percents.	E/S	Student Edition: 210-213, 216-219, 220-223, 233, 234, 312-315 Teacher Wraparound Edition: A 219, 223, 315; DI 221, 317; IE 211, 221; PS 235
Patterns, Functions, and Algebra		
Content Standard 2.0: <i>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations.</i>		
2.7.1 Use and create coordinate graphs (i.e., linear, geometric, and exponential) to represent and/or interpret patterns and relationships, with and without calculators.	E/S	Student Edition: 112-115, 137 #46-#48, 143, 146 #9, 147 #20, 177-181, 182-185, 191 #13 <i>Hands-On Lab</i> 176 <i>The Game Zone</i> 117 Teacher Wraparound Edition: IE 113, 179, 183
2.7.2 Identify, model, describe, and evaluate relationships using graphs, with and without technology.	E/S	Student Edition: 51 #11, #17, 60-63, 85-89, 94 #7, 101 #14, 137 #59, #60, 169 #40, #41, 331 #10, 367 #12 <i>Problem-Solving Strategy</i> 58-59 <i>Spreadsheet Investigation</i> 90-91 Teacher Wraparound Edition: A 59; IE 86, 87

STANDARDS		PAGE REFERENCES
2.7.3 Evaluate formulas and algebraic expressions for given values of a variable (e.g., $A = lw$ given $l = 6$, $w = 2$, then $A = 12$).	I/S	Student Edition: 18-21, 27 #50, 28 #18, 47 #25-#31, 49 #3-#6, 139 #4, 148, 161 #3, 261 #37, 283 #10 <i>Hands-On Lab</i> 488 <i>The Game Zone</i> 29 Teacher Wraparound Edition: IE 19, 179
2.7.4 Represent mathematical situations using algebraic language and symbols	I/S	Student Edition: 4, 18-21, 24-27, 150-153, 191 #19, #20, 332 <i>Study Skill</i> 153 Teacher Wraparound Edition: A 273; DI 25, 150; IE 151; PS 49
2.7.5 Combine like terms variable expressions (e.g., $2a+3a=5a$).	I/L	See Glencoe's <i>Mathematics: Applications and Concepts Course 3</i> © 2006 Student Edition: 469-473
2.7.6 Model, identify, and solve linear equations and inequalities using concrete and informal methods; relate this process to the order of operations.	I/S	Student Edition: 148, 172-175, 177-181, 185 #33-#35, 187, 188, 191 #19, 297 Teacher Wraparound Edition: A 181; DI 173; IE 173, 179
2.7.7 Generate and graph a set of ordered pairs to solve a linear equation	I/S	Student Edition: 177-181, 185 #33-#35, 188, 189 #13-#15, 191 #20 <i>Hands-On Lab</i> 176 Teacher Wraparound Edition: A 181; IE 179
Measurement		
Content Standard 3.0: <i>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements.</i>		
3.7.1 Estimate and convert, units of measure for mass , and volume within the same measurement system; compare corresponding units of the two systems.	E/S	Student Edition: 39-41, 48, 57 #26, 260 #14, 520-522, 526 #23-#25, 527 #31 <i>Spreadsheet Investigation</i> 523 <i>WebQuest</i> 193 Teacher Wraparound Edition: A 522; IE 39, 521; MIC 193

STANDARDS		PAGE REFERENCES
3.7.2 Given a measurement, determine the greatest possible error .	W/L	Student Edition: 441 #2, 495 #26, #27, 542-545, 617, 625 <i>Hands-On Lab</i> 536-537 <i>Problem-Solving Strategy</i> 518-519 <i>Study Tip</i> 484 Teacher Wraparound Edition: A 545
3.7.3 Estimate, measure to the required degree of accuracy, derive, and apply standard formulas to find the volume and surface area of solid figures (e.g., cylinders , triangular solids).	I/S	Student Edition: 524-527, 528 #10-#12, 535 #28-#30, 538-541 <i>Hands-On Lab</i> 531 #9 Teacher Wraparound Edition: B 520; IE 525, 539; TNT 539
3.7.5 Write, solve, and apply proportions.	I/S	Student Edition: 161 #3, 297, 298 #4, 300, 304-307, 327, 329 Teacher Wraparound Edition: PS 329
3.7.6 Use elapsed time to solve practical problems (e.g., develop schedules, plan trips).	E/S	Student Edition: 165 #8, 237 #18
Spatial Relationships and Geometry		
Content Standard 4.0: <i>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will identify, represent, explain, verify, and apply spatial relationships and geometric properties.</i>		
4.7.1 Identify, describe by properties, classify, compare, and draw regular and irregular polygons; find the sum of the interior angles.	E/S	Student Edition: 414 #3, #8, 422-425, 428-431, 434-437, 440-443, 446-449, 472 #36, 498, 514-517 <i>Hands-On Lab</i> 416-417, 426-427, 432-433 <i>Problem-Solving Strategy</i> 444 Teacher Wraparound Edition: A 415, 425, 437; DI 441; IE 414, 423, 435
4.7.2 Use ratio and proportions to create scale drawings.	I/L	Student Edition: 304-308, 315 #43, 318 #49, 327 <i>Spreadsheet Investigation</i> 309 Teacher Wraparound Edition: DI 304; IE 305

STANDARDS		PAGE REFERENCES
4.7.3 Use coordinate geometry and models to demonstrate geometric transformations including rotate/turn, translate/slide, reflect/flip by finding the ordered pairs that describe the location of the original and the transformed figures.	I/S	Student Edition: 451-454, 456-459, 464, 467 #18, 473 #48, #49 <i>Hands-On Lab</i> 460-461 <i>Spreadsheet Investigation</i> 455 Teacher Wraparound Edition: IE 452, 457
4.7.4 Make a model of a three-dimensional figure from a two-dimensional drawing and make a two-dimensional drawing of a three dimensional object.	I/L	Student Edition: 514-517, 532, 541 #20 <i>Hands-On Lab</i> 512-513, 530-531 <i>Problem-Solving Strategy</i> 518-519 Teacher Wraparound Edition: A 517; IE 515; PS 549
4.7.5 Use coordinate geometry to represent slope, midpoint, and horizontal and vertical distance.	I/S	Student Edition: 182-185, 191 #18 Teacher Wraparound Edition: A 185; B 182; IE 183
4.7.6 Describe the properties of geometric relationships including parallel lines, perpendicular lines, bisectors, triangles, and quadrilaterals (e.g., properties of angles formed by a transversal of parallel lines).	I/S	Student Edition: 428-431, 434-437, 440-443, 463 <i>Hands-On Lab</i> 416-417, 426-427 Teacher Wraparound Edition: A 431; IE 435, 441
4.7.7 Model the Pythagorean Theorem ; solve for the hypotenuse using the theorem.	I/S	Student Edition: 479-482 <i>Hands-On Lab</i> 478 Teacher Wraparound Edition: B 479; DI 480; TNT 480
4.7.8 Construct and verify congruent angles, and parallel and perpendicular lines using hand tools.	W/L	Student Edition: 422-425, 429, 440-443 <i>Hands-On Lab</i> 416-417, 426-427 Teacher Wraparound Edition: TNT 440

STANDARDS		PAGE REFERENCES
Data Analysis		
Content Standard 5.0: <i>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections.</i>		
5.7.1 Organize, display, read, and analyze data, with and without technology, using a variety of displays including frequency distributions and circle graphs.	E/S	Student Edition: 54-57, 64-68, 76-79, 85-89, 94, 101 #12, #16, 418-421, 431 #32, 605 #3, #4 <i>Hands-On Lab</i> 73, 344 <i>Problem-Solving Strategy</i> 58-59 <i>Spreadsheet Investigation</i> 90-91 <i>WebQuest</i> 3, 103, 193 Teacher Wraparound Edition: B 76; DI 55; IE 55
5.7.4 Select, use, and graph (when possible) measures of variability including range, distribution and possible outliers.	I/S	Student Edition: 64-68, 69-72, 76-79, 94 #9-#11, 101 #15, 129 #6 <i>Hands-On Lab</i> 73 <i>Problem-Solving Strategy</i> 58-59 <i>WebQuest</i> 3, 103, 193 Teacher Wraparound Edition: DI 80; DS 66; IE 65
5.7.6 Given a set of data, interpolate and extrapolate to make and explain predictions.	E/S	Student Edition: 60-63, 68 #27, 101 #15, 345-347, 357 #38, 365 #10 <i>Hands-On Lab</i> 73, 344 <i>Problem-Solving Strategy</i> 58-59 <i>WebQuest</i> 3, 103 Teacher Wraparound Edition: A 59; B 60; DI 59, 346; IE 61

STANDARDS		PAGE REFERENCES
Problem Solving		
<p>Process Standard 6.0: <i>Students will develop their ability to solve problems by engaging in developmentally appropriate problem-solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts in order to: formulate their own problems; find solutions to problems from everyday situations; develop and apply strategies to solve a wide variety of problems; and integrate mathematical reasoning, communication and connections.</i></p>		
<p>6.1</p> <p>Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.</p> <p>S 1.2.3; S 1.5.1; S 1.8.1; S 1.8.4; S 1.12.2; S 1.12.4; S 2.12.1; S 3.2.3; S 10.5.2; S 14.8.6; S 19.12.2; S 21.3.1</p>	E/S	<p>Student Edition:</p> <p>6-9, 52, 238, 242 #2</p> <p><i>Hands-On Lab</i> 37</p> <p><i>Key Concept</i> 31, 109, 121, 157</p> <p><i>Problem-Solving Strategy</i> 22-23, 58-59, 132-133, 164-165, 444-445</p> <p><i>Study Skills</i> 153</p> <p><i>Test-Taking Tip</i> 191</p> <p><i>WebQuest</i> 3, 103</p> <p>Teacher Wraparound Edition:</p> <p>A 23, 231, 273; B 14, 240; DI 7, 22, 109, 211; PS 189; TNT 7</p>
<p>6.2</p> <p>Apply previous experience and knowledge to new problem-solving situations.</p>	E/S	<p>Student Edition:</p> <p>6-9</p> <p><i>Problem-Solving Strategy</i> 58-59, 164-165, 252-253, 496-497, 518-519</p> <p><i>WebQuest</i> 3, 285</p> <p>Teacher Wraparound Edition:</p> <p>A 273, 421; B 54, 64; DI 7, 271, 298, 355, 381; PS 281; TNT 539</p>
<p>6.5</p> <p>Verify, interpret, and evaluate results with respect to the original problem situation, determining an efficient strategy for the given situation.</p> <p>S 21.5.3; S 21.12.3</p>	E/S	<p>Student Edition:</p> <p>6-9, 52, 60-63, 345-347</p> <p><i>Hands-On Lab</i> 73, 344</p> <p><i>Problem-Solving Strategy</i> 22-23, 252-253, 338-339, 444-445, 496-497</p> <p><i>Study Skills</i> 153</p> <p><i>Test-Taking Tip</i> 331</p> <p>Teacher Wraparound Edition:</p> <p>B 224; DI 7, 59, 346, 355, 471; PS 405; TNT 7</p>

STANDARDS		PAGE REFERENCES
6.6 Try more than one strategy when the first strategy proves to be unproductive.	E/L	Student Edition: 6-9, 473 #40-#44 <i>Problem-Solving Strategy</i> 22-23, 252-253, 444-445, 496-497 <i>Study Skills</i> 153 Teacher Wraparound Edition: PS 189; TNT 7, 539
6.7 Apply multi-step, integrated, mathematical problem-solving strategies, persisting until a solution is found or until it is clear that no solution exists. S 19.12.2	E/S	Student Edition: 26 #2, 367 #17 Teacher Wraparound Edition: B 224, DI 320, 355, 471, 497, 515; PS 189, 405; TNT 167, 539
6.9 Generalize solutions and strategies from earlier problems to new problem situations.	E/L	Student Edition: <i>Hands-On Lab</i> 344 <i>Problem-Solving Strategy</i> 252-253, 444-445, 496-497 Teacher Wraparound Edition: A 273, 421; DI 109, 161, 381, 471; PS 235, 281, 405
6.10 Interpret and solve a variety of mathematical problems by paraphrasing, identifying necessary and extraneous information, selecting and justifying efficient methods and/or strategies, and ensuring the answer is reasonable.	E/S	Student Edition: 60-63, 345-347 <i>Hands-On Lab</i> 344 <i>Problem-Solving Strategy</i> 22-23, 252-253, 338-339, 391-392, 444-445 Teacher Wraparound Edition: A 308, 315; B 22, 244, 254; DI 497
6.13 Use technology, including calculators, to solve problems and verify solutions. S 24.5.5; S 24.8.5	E/L	Student Edition: 41 #42, 295 #24, 357 #30 <i>Spreadsheet Investigation</i> 309, 361, 455 <i>WebQuest</i> 3, 103, 409 Teacher Wraparound Edition: B 14; DI 211; PS 329; TNT 204, 293
6.14 Use technology, including calculators, to investigate, define, and describe quantitative relationships such as patterns and functions. G 7.12.3; S 1.5.1; S 1.12.2; S 1.12.4; S 14.8.6; S 24.5.5; S 24.8.5	E/L	Student Edition: 41 #42, 357 #30 <i>Spreadsheet Investigation</i> 90-91, 361 <i>WebQuest</i> 3, 103, 409 Teacher Wraparound Edition: PS 189

STANDARDS		PAGE REFERENCES
Mathematical Communication		
Process Standard 7.0: <i>Students will develop their ability to communicate mathematically by solving problems in which there is a need to obtain information from the real world through reading, listening, and observing in order to: translate this information into a mathematical language and symbols; process this information mathematically; and present results in written, oral and visual formats.</i>		
7.1 Discuss and exchange ideas about mathematics as a part of learning. E 10.2.3; E 10.3.3; E 10.5.3; E 10.3.1; E 10.5.1; E 10.12.1; S 23.5.2	E/L	Student Edition: <i>Hands-On Lab</i> 37, 301, 344, 512 <i>Spreadsheet Investigation</i> 309 <i>Study Skill</i> 474 <i>WebQuest</i> 3, 103, 409 Teacher Wraparound Edition: A 415; B 18, 38, 542; MIC 3, 103; PC 4F, 104F, 286F; PS 49
7.2 Use inquiry techniques (e.g., discussion, questioning, research, data gathering) to solve mathematical problems. E 4.2.3; E 10.2.2; E 10.3.2; E 10.5.2; E 10.8.2; E 11.2.1; E 11.3.1; E 11.5.1; E 11.8.1; E 11.12.1; E 11.2.2; S 1.5.1; S 1.8.1; S 1.8.4; S 1.12.4; S 10.5.2; S 14.8.6; S 21.3.1	E/L	Student Edition: 6-9 <i>Hands-On Lab</i> 37, 73, 301, 478, 512 <i>WebQuest</i> 3, 103, 409 Teacher Wraparound Edition: B 6, 58; BWV 368D; DI 7, 55, 109; MIC 3, 103, 409; PS 49
7.3 Read expository text to learn about mathematics. E 1.8.3; E 1.12.3; E 2.12.3; E 4.8.1; E 4.8.2; E 4.8.3	I/L	Student Edition: <i>Concept Summary</i> 39, 267, 555, 561 <i>Study Skill</i> 42, 153, 474 Teacher Wraparound Edition: BWV 368D; DI 66; PC 4F, 52F, 286F
7.6 Interpret and solve word problems without the necessity of key words or phrases.	E/S	Student Edition: <i>Hands-On Lab</i> 37, 73 <i>Problem-Solving Strategy</i> 22-23, 338-339, 496-497 Teacher Wraparound Edition: A 23; B 112, 254; DI 7, 15, 35, 55, 66, 85, 211
7.9 Model and explain mathematical relationships using oral, written, graphical, and algebraic methods. E 5.8.1; E 5.8.2; E 6.8.2; E 11.8.5; E 11.12.5; S 1.12.2; S 1.12.4; S 14.8.6; S 20.12.1; S 22.8.2; S 22.12.2	E/S	Student Edition: 4, 113 #3, #4, 115 #37-#41, 202 #12, 270 #1-#3, 275 <i>Problem-Solving Strategy</i> 302-303, 518-519 <i>Study Skill</i> 125 Teacher Wraparound Edition: A 88, 111, 211; B 38; DI 381

STANDARDS		PAGE REFERENCES
7.10 Evaluate the effectiveness of written and oral presentations of mathematics. S 21.5.3; S 23.5.2	I/L	Student Edition: <i>Problem-Solving Strategy</i> 132-133, 338-339, 391-392, 444-445 Teacher Wraparound Edition: A 23, 79, 181; B 14; DI 15, 55, 109, 335; MIC 409
7.11 Make conjectures and present arguments in discussions of mathematical ideas. S 21.5.3; S 23.5.3	E/L	Student Edition: 182, 244, 248, 422, 534 <i>Hands-On Lab</i> 118-119, 126-127, 154-155, 296, 432-433 Teacher Wraparound Edition: A 133, 213; B 160, 297
7.13 Explain and evaluate thinking about mathematical ideas and solutions. E 10.8.2; E 10.12.4; S 21.5.3	I/L	Student Edition: <i>Problem-Solving Strategy</i> 338-339, 444-445 <i>Study Skill</i> 153 Teacher Wraparound Edition: A 63, 111, 152; B 22, 252; DI 66; TNT 198
7.15 Use everyday language to explain thinking about strategies and solutions to mathematical problems. S 21.5.3; S 23.5.3	E/L	Student Edition: <i>Problem-Solving Strategy</i> 338-339, 496-497 <i>Study Skill</i> 153 Teacher Wraparound Edition: A 415; B 58, 456; DI 55, 66, 85, 441, 471; TNT 198
7.16 Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.	E/S	Student Edition: <i>Problem-Solving Strategy</i> 132-133, 338-339, 391-392, 444-445 <i>Study Skill</i> 153 Teacher Wraparound Edition: A 23, 79, 181; B 14; DI 15, 55, 109, 335
7.17 Use mathematical notation to communicate and explain mathematical situations. S 21.2.1	E/L	Student Edition: 10-13, 43-45, 48, 51 #10 <i>Spreadsheet Investigation</i> 523 Teacher Wraparound Edition: A 45; PS 49

STANDARDS		PAGE REFERENCES
Mathematical Reasoning		
Process Standard 8.0: <i>Students will develop their ability to reason mathematically by solving problems in which there is a need to investigate significant mathematical ideas and construct their own learning in all content areas in order to justify their thinking; reinforce and extend their logical reasoning abilities; reflect on and clarify their own thinking; and ask questions to extend their thinking.</i>		
8.2 Justify answers and the steps taken to solve problems, with and without manipulatives and physical models. S 1.5.1; S 10.5.2; S 20.5.1	E/S	Student Edition: 6-9, 169 #42 <i>Hands-On Lab</i> 344 <i>Problem-Solving Strategy</i> 22-23, 252-253, 338-339, 444-445 <i>Study Skill</i> 42, 125 <i>WebQuest</i> 193 Teacher Wraparound Edition: A 111, 273; DI 177; PC 4F; PS 189; TNT 217
8.4 Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems. Ec 3.8.2; Ec 3.8.3; Ec 9.8.4; Ec 3.12.1; Ec 3.12.2; Ec 3.12.3; Ec 3.12.4; Ec 6.12.6; G 7.12.4; S 17.3.2	E/S	Student Edition: 34-36, 51 #17, 63 #14, 79 #23, 88 <i>Hands-On Lab</i> 176, 344 <i>Problem-Solving Strategy</i> 132-133, 444-445 <i>WebQuest</i> 193
8.5 Follow a logical argument and judge its validity. E 4.8.4; E 4.12.4	E/L	Student Edition: 169 #42, 357 #32, 551 #20 <i>Hands-On Lab</i> 37, 344 <i>Problem-Solving Strategy</i> 22-23, 252-253, 338-339, 444-445 Teacher Wraparound Edition: DI 11; PS 189
8.7 Recognize and apply deductive and inductive reasoning in both concrete and abstract contexts.	E/S	Student Edition: 380 #15, 393-396 <i>Hands-On Lab</i> 397 <i>Problem-Solving Strategy</i> 22-23, 444-445 Teacher Wraparound Edition: A 315; DI 399, 445; PS 405
8.8 Ask questions to reflect on, clarify, and extend thinking.	E/L	Student Edition: 6-9, 63 #14, 72 #19, 169 #42, 321 #24 <i>Problem-Solving Strategy</i> 22-23, 252-253, 444-445, 496-497 <i>WebQuest</i> 3, 193, 285 Teacher Wraparound Edition: A 79; DI 7; PS 189

STANDARDS		PAGE REFERENCES
8.9 Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.	I/L	Student Edition: 6-9, 169 #42, 357 #32, 551 #20 <i>Hands-On Lab</i> 37 <i>Problem-Solving Strategy</i> 22-23, 252-253, 338-339, 444-445 <i>Study Skill</i> 125 Teacher Wraparound Edition: A 273; DI 177; PC 4F; PS 189
Mathematical Connections		
Process Standard 9.0: <i>Students will develop the ability to make mathematical connections by solving problems in which there is a need to view mathematics as an integrated whole, identifying relationships between context strands, and integrating mathematics with other disciplines, allowing the flexibility to approach problems in a variety of ways within and beyond the field of mathematics.</i>		
9.1 Link new concepts to prior knowledge.	E/L	Student Edition: 295 #23, 517 #22 <i>Hands-On Lab</i> 344 <i>Study Skill</i> 474 <i>WebQuest</i> 43, 193 Teacher Wraparound Edition: MIC 3, 193
9.2 Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics.	E/S	Student Edition: 13 #60, 43-45, 104, 112-115, 129 #6, 238, 358-361, 453 #12, 517 #22 <i>Hands-On Lab</i> 344 <i>WebQuest</i> 3, 103, 193, 409 Teacher Wraparound Edition: B 60; DI 113, 139; IE 139; PS 465
9.3 Use models to explain the relationship of concepts to procedures. S 1.5.1; S 1.8.1; S 1.12.2; S 1.8.4; S 1.12.4; S 10.5.2; S 14.8.6; S 20.5.1	E/S	Student Edition: 34-36, 104, 223 #34-#37, 295 #23, 368, 453 #12 <i>Hands-On Lab</i> 301, 344 <i>Study Skill</i> 125 <i>WebQuest</i> 285 Teacher Wraparound Edition: A 21, 253; B 60; DI 66, 113; PS 329
9.4 Use the connections among mathematical topics to develop multiple approaches to problems. S 20.8.1	I/L	Student Edition: 52, 57 #13-#15, 63 #14, 79 #23, 85-89, 104, 213 #44-#45 <i>Hands-On Lab</i> 73, 344 Teacher Wraparound Edition: B 60; DI 113; PS 365

STANDARDS		PAGE REFERENCES
<p>9.6</p> <p>Use and analyze the connections between Mathematics and other disciplines.</p> <p>Ec 2.8.2; Ec 2.12.4; Ec 2.12.8; H 2.8.3; H 2.12.3; S 2.12.1; S 14.12.5</p>	I/L	<p>Student Edition:</p> <p>104, 213 #44, #45, 286, 431 #24, 454 #13, 517 #22</p> <p><i>Hands-On Lab</i> 301, 344</p> <p><i>WebQuest</i> 3, 103, 193</p> <p>Teacher Wraparound Edition:</p> <p>B 381; DI 66, 255, 265, 293; MIC 3, 409</p>
<p>9.7</p> <p>Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g., rhythm in music and motion in science).</p> <p>S 1.5.1; S 1.8.1; S 1.12.2; S 1.8.4; S 1.12.4; S 10.5.2; S 14.8.6; S 19.12.2</p>	E/L	<p>Student Edition:</p> <p>449 #24, 453 #12, 517 #22</p> <p><i>Hands-On Lab</i> 344</p> <p><i>WebQuest</i> 193</p> <p>Teacher Wraparound Edition:</p> <p>A 415; DI 35, 85, 113, 255, 265, 391; TNT 39</p>
<p>9.8</p> <p>Identify, explain, and use mathematics in everyday life.</p> <p>Ec 2.3.2; Ec 2.12.12; Ec 5.2.1; Ec 5.3.1; S 24.12.2</p>	I/S	<p>Student Edition:</p> <p>52, 104, 231 #56, 261 #36, 304-308, 354-357, 358-360, 485 #20</p> <p><i>Hands-On Lab</i> 344</p> <p><i>Real-Life Careers</i> 19, 228</p> <p><i>WebQuest</i> 103, 193</p> <p>Teacher Wraparound Edition:</p> <p>DI 95, 109, 241, 358; ICS 286D; TNT 39</p>