

A Correlation of

Scott Foresman • Addison Wesley

en**Vision**MATH™

to the

**Iowa Core Curriculum
Essential Concepts and Skill Sets
of the Iowa Core Curriculum**

Grades K - 6



G/M-263

Correlation Introduction

This correlation is designed to show the close alignment between Scott Foresman-Addison Wesley enVisionMATH and the Iowa Core Curriculum Essential Concepts and Skill Sets of the Iowa Core Curriculum. Correlation page references are to the Teacher's Edition and associated Student Edition.

The enVisionMATH™ program is based around scientific research on how children learn mathematics as well as on classroom-based evidence that validates proven reliability.

Personalized Curriculum

enVisionMATH™ provides 20 (16 in Kindergarten) focused topics that are coherent, digestible groups of lessons focusing on one or a few related content areas. A flexible sequence of topics is small enough for a district to rearrange into a personalized curriculum that matches the sequence preferred by the district. The curriculum is designed so that all standards can be taught before the major mathematics testing.

Instructional Design

enVisionMATH™ teaches for deep conceptual understanding using research-based best practices. Essential understandings connected by Big Ideas are explicitly stated in the Teacher's Edition. Daily Spiral Review and the Problem of the Day focus foundational skills and allow for ongoing practice with a variety of problem types. Daily interactive concept development encourages students to interact with teachers and other students to develop conceptual understanding.

Visual Learning allows students to benefit from seeing math ideas portrayed pictorially as well as being able to see connections between ideas. enVisionMATH™ created a Visual Learning Bridge which is a step-by-step bridge between the interactive learning activity and the lesson exercises to help students focus on one idea at a time and see the connections within the sequence of ideas. The strong sequential visual/verbal connections deepen conceptual understanding for students of all learning modalities and are particularly effective with English language learners and struggling readers. Guiding questions in blue type help the teacher guide students through the examples, ask probing questions to stimulate higher order thinking, and allow for checking of understanding.

Differentiated Instruction

enVisionMATH™ engages and interests all students with leveled activities for ongoing differentiated instruction. A Teacher-Directed Intervention activity at the end of every lesson provides immediate opportunities to get students on track. In addition, ready made leveled learning centers for each lesson allow different students to do the same activity at different levels at the same time giving the teacher uninterrupted time to focus on reteaching students who require intervention. All centers can be used repeatedly due to the inclusion of a "Try Again" at the end. They can also be used for ongoing review and they can be used year after year. Topic-specific considerations for EL, Special Education, At-Risk, and Advanced students enable the teacher to accommodate the diverse learners in the classroom.

Table of Contents

Kindergarten – Grade Two	1
Grades Three - Five	6
Grade Six	11

**Scott Foresman – Addison Wesley enVisionMATH
to the
Iowa Core Curriculum
Essential Concepts and Skill Sets of the Iowa Core Curriculum**

Grades K-2

Primary Elementary Grades

Number and Operations

- **Count, represent, read, compare, order and conserve whole numbers**
Grade K: 49A-50, 51A- 54A, 54C, 57A- 58A, 58C, 59, 60, 62C, 63-64C, 65A-66C, 67A-68C, 69A- 70C, 73A-74, 75A-76C, 77A-78C, 79A- 80C, 81A-82C, 83A-84C, 85A- 86C, 87A-88C, 89A-90C, 91A- 92C, 99A-100, 101-102C, 103A-104C, 105A-106C, 107A-108C, 211A-212, 213- 214C, 215A-216C, 217A-218C, 219A-220C
Grade 1: 3A, 3-6, 6B, 7A, 7-10B, 11-14B, 15-18, 18B, 19A, 19-22B, 23A, 23-26B, 31A, 31-34B, 35A, 35-38, 38B, 39A, 39-42B, 43A, 43-46B, 263A, 236-266B, 267A, 267-270B, 307-310B, 311A, 311-314B, 315A, 315-128B, 319A, 319-322B, 323A, 323-326B, 332A, 332-334B, 335A, 338B, 339-342, 342B, 343A-346, 351A, 351-354B, 355-358B, 359A, 359-362B
Grade 2: 99-102, 102B, 103-106, 106B, 107-110, 110B, 111-114, 114B, 511-514, 514B, 515-518, 518B, 519-522, 522B

- **Develop understandings of addition and subtraction and strategies for basic addition facts and related subtraction facts**
Grade K: 175A-176, 177-178C, 179-180C, 181-182C, 183-184C, 185-186C, 187-188C, 189-190C, 193I-193J, 195-196C, 197-198C, 199-200C, 201-202C, 203-204C, 205-206C, 207-208C
Grade 1: 51A-54B, 55A-58B, 59A-62B, 63A-66B, 67A-70B, 71A-74B, 75A-78B, 83A-86B, 87A-90B, 91A-94B, 95A-98B, 99A-102B, 103A-106B, 107A-110B, 111A-114B
Grade 2: 1A-1H, 1-2, 3A-6B, 7A-10B, 11A-14B, 15A-18B, 19A-22B, 23A-26B, 27A-30B, 33A-33H, 33-34, 35A-38B, 39A-42B, 43A-46B, 47A-50B, 75A-78B, 79A-82B, 87-90B, 291A-249B, 303A-306B

- **Express numbers as equivalent representations to fluently compose and decompose numbers (putting together and taking apart)**
Grade K: 61-62C, 77-78C, 83-84C, 89-90C
Grade 1: 49D, 51-54B, 55A-58B, 59A-62B, 117B, 119A-122B, 123A-126B, 127-130B, 131-134B, 135-138B, 263A-266B, 301B, 301D, 301F-301H, 301-302, 303-306B, 307-310B, 311-314B, 315-318B, 319-322B, 323-326B, 335
Grade 2: 97A-97E, 97G-97H, 99A-102B, 103A-106B, 107-110

- **Develop fluency and quick recall of addition facts and related subtraction facts and fluency with multi-digit addition and subtraction**
Grade K: 175A-176, 177-178C, 179-180C, 181-182C, 183-184C, 185-186C, 187-188C, 189-190C, 193I-193J, 195-196C, 197-198C, 199-200C, 201-202C, 203-204C, 205-206C, 207-208C
Grade 1: 141A-141D, 141G-141H, 141, 143A-146B, 147A-150B, 151A-154B, 155A-158B, 159A-162B, 169A-169D, 169G-169H, 169, 171A-174B, 175A-178B, 179A-182B, 183A-186B, 479A-479E, 479G-479H, 481A-484B, 485-488B, 489-492B, 515A-515H, 515-516, 517A-520B, 521-524B, 525A-528, 529-522B
Grade 2: 1A-1H, 1-2, 3A-6B, 7A-10B, 11A-14B, 15A-18B, 19A-22B, 23A-26B, 27A-30B, 33A-33H, 33-34, 35A-38B, 39A-42B, 43A-46B, 47A-50B, 75A-78B, 79A-82B, 83A-86C, 169A-169H, 169-170, 171A-174B, 175A-178B, 179A-182B, 183A-186B, 193A-193H, 193-194, 195A-198B, 199A-202B, 203A-206B, 207A-210B, 217A-217H, 217-218, 219A-222B, 223A-226B, 227A-230B, 231A-234B, 235A-238B, 239A-242B, 243A-246B, 249A-249H, 249-250, 251A-254B, 255A-258B, 259A-262B, 263A-266B, 267A-270B, 271A-274B,
- **Estimate the answer to an addition or subtraction problem before computing, and determine whether the computed answer makes sense**
Grade K: Related content: 186, 190A
Covered more specifically in **Grade 2:** 287-290B, 299-302B
Grade 1: Related content: 626
Covered more specifically in **Grade 2:** 287-290B, 299-302B
Grade 2: 287-290B, 299-302B
- **Develop an understanding of whole number relationships, including grouping in tens and ones and apply place-value concepts**
Grade K: 105A-106C, 211B, 211, 214, 214C, 216, 216C, 218, 218C, 220, 220C, 227A-228C
Grade 1: 261A, 263-266B, 271-274B, 277, 301A-301D, 301G-301H, 301-302, 303-306B, 307-310B, 311-314B, 315-318B
Grade 2: 97A-97E, 97G-97H, 99A-102B, 103A-106B, 107-110
- **Understand fractional parts are equal shares or equal portions of a whole unit (a unit can be an object or a collection of things)**
Grade K: 135A-135H, 135-136, 137A- 138C, 139- 140C, 141-142C
Grade 1: 583B-583H, 583-584, 585A-588B, 589A-592B, 593A-596B
Grade 2: 349A-349H, 349-350, 351A-354B, 355A-358B, 359A-362B, 367A-370B

Algebra

- **Recognize, describe, create and extend repeating and growing patterns such as physical, geometric and numeric patterns and translate from one representation to another**
Grade K: 31A-31J, 31-32, 33-34C, 35-36C, 37-38C, 39-40C, 41-42C, 43-44C, 45-46C, 221-222C, 225-226C, 227-228C, 229-230C, 231-232C
Grade 1: 15-18B, 22, 205, 213, 221, 229, 233, 241A-241H, 241-242, 243-246B, 247A-250B, 251-254B, 255A-258B, 275A-278B, 279A-282B, 283A-286B, 291-294B, 309, 343-345, 459, 463, 619
Grade 2: 127-130B, 187-190B, 357, 512, 527-530B, 543-546B, 590, 635-638B
- **Sort, classify, and order objects by size, number and other properties**
Grade K: 1A-1J, 1-2, 5- 6C, 7A-8C, 9A-10C, 12, 12A, 12C, 63A-64C, 113F, 116, 116A, 116B, 117, 117A, 118- 118C, 153A-154C, 199A-200C, 289A-290C
Grade 1: R3, 193B, 193, 199-202B, 235A-238B, 395-398B, 419-422B, 431-434B, 443A-446B, 465-468B
Grade 2: 111A-114B, 313C, 313F-313H, 314, 315-318B, 417, 432-433, 468-469,
- **Demonstrate the use of the commutative and associative properties and mathematical reasoning to solve for the unknown quantity in addition and subtraction problems; justify the solution**
Grade K: Related content: 186C, 190C
Covered more specifically in **Grade 1:** 49B, 71-74B
Grade 1: 49B, 71-74B
Grade 2: 33B, 33G-33H, 47A-50B, 52-53
- **Understand equality as meaning “the same as” and use the = symbol appropriately**
Grade K: 137-138C, 175B-175D, 175G, 175, 185A-186, 187-188C, 193B-193E, 193G, 193-194, 203-204C, 205-206C
Grade 1: 49B, 49E-49F, 49, 63-66B, 95-98B, 339A-342, 342B
Grade 2: 1A-1H, 1-2, 4-6B, 7-10B, 12-14B, 15-18B, 19-22B

Geometry

- **Recognize and describe shapes and structures in the physical environment**
Grade K: 113D, 113G, 113I-113J, 115-116C, 118-118C, 126-126C, 128, 128C, 130A, 130C, 132A, 132C
Grade 1: 193A, 193G-193H, 193-194, 195A, 197, 227-230A
Grade 2: 314, 316-317, 318B, 319, 322, 343

- **Compose and decompose geometric shapes, including plane and solid figures to develop a foundation for understanding area, volume, fractions, and proportions**
Grade K: 113D, 119A-120C
Grade 1: 203-206B, 207-210B, 223-226B
Grade 2: 313B, 323A-326B, 327A-330B
- **Identify, name, sort, and describe two- and three- dimensional geometric figures regardless of size or orientation**
Grade K: 113D, 113I-113J, 115-116C, 117A-117C, 125A-126C
Grade 1: 193A-193D, 193G-193H, 193-194, 195A-198B, 199A-202B, 215-218B, 227-230B, 231A-234B, 235A-238B
Grade 2: 313B, 313E-313H, 313-314, 315A-318B, 319A-322B,
- **Describe and specify space and location with simple relationships and with coordinate systems**
Grade K: 15A-15J, 15-16, 17-18C, 19A-20C, 21-22C, 23A-24C, 25A-26C, 27A-28C
Grade 1: 553-556B
Grade 2: 491A-494B
- **Experience and recognize slides, flips, turns and symmetry to analyze mathematical situations**
Grade K: 121A-122C, 127A-128C
Grade 1: 193B, 211-214B
Grade 2: 335A-338B
- **Use attributes of geometric figures to solve spatial problems**
Grade K: 121A-122C, 127A-128C, 129A-130C, 131-132C
Grade 1: 193B, 203A-206B, 207-210B, 211A-214B, 215A-218B, 219A-222B, 223A-226B
Grade 2: 313C-313D, 323A-326B, 327A-330B, 331A-334B, 335A-338B, 339A-342B, 343A-346B

Measurement

- **Identify attributes that are measurable, such as length, weight, time and capacity, and use these attributes to order objects and make direct comparisons**
Grade K: 151A-151J, 151-152, 153-154C, 155A-156C, 157A-157C, 163A-164C, 167A-168C, 171-172C, 253A-254C
Grade 1: 395-398B, 419-422B, 431A-434B, 443A-446B, 465-468B
Grade 2: 379A-382B, 417, 432-433, 468-469

- **Estimate, measure and compute measurable attributes while solving problems**
Grade K: 159A-160C, 165A-166C, 169A-170C, 171-172C
Grade 1: 393A, 399-402B, 407-410B, 411A-414B
Grade 2: 377B, 383A-386B, 387A-390B, 391A-394B, 395A-398B, 413C, 416A-418B, 419A-422B, 423A-426B, 427A-430B, 431A-434B, 435A-438B, 439A-442B, 459A-462B,
- **Estimate and measure length using standard (customary and metric) and non-standard units with comprehension**
Grade K: 159A-160C
Grade 1: 393A, 399-402B, 407-410B, 411A-414B
Grade 2: 377B, 383A-386B, 387A-390B, 391A-394B, 395A-398B,

Data Analysis

- **Collect, sort, organize, and represent data to ask and answer questions relevant to the K-2 environment**
Grade K: 287B, 287F, 287G, 291- 292C
Grade 1: 557-560B
Grade 2: 479A-482B, 483A-486B, 487A-490B, 491A-494B, 503A-506B
- **Compare different representations of the same data using these types of graphs: bar graphs, frequency tables, line plots, and picture graphs**
Grade K: 290-291, 292-293,
Grade 1: 561-564B, 569-572B
Grade 2: 479-482B, 483-486B, 487A-490B, 503-506B
- **Use information displayed on graphs to answer questions and make predictions, inferences and generalizations such as likely or unlikely events**
Grade K: 287A-287D, 287G-287J, 289-290A, 290C, 292, 292A, 293, 294, 294A, 295, 296, 296A, 296B, 296C, 299-300C
Grade 1: 539D, 541-544B, 545A-548B, 549A-552B, 557A-560B, 561, 564, 565A-568B, 569A-572B
Grade 2: 479-482B, 483-486B, 487A-490B, 503-506B

Scott Foresman – Addison Wesley enVisionMATH
to the
Iowa Core Curriculum
Essential Concepts and Skill Sets of the Iowa Core Curriculum
Grades 3-5

Intermediate Elementary Grades

Number and Operations

- **Develop an understanding of multiplication and division concepts and strategies for basic multiplication facts and related division facts**
Grade 3: 106A-106B, 108A-109B, 110A-113B, 114A-115B, 130A-131B, 162A-162B, 164A-165B, 166A-167, 169A-169B, 170A-171B
Grade 4: 52A-52F, 54A-55, 57A-57B, 58A-59B, 60A-61B, 74A-74F, 76A-79B, 80A-81B, 82A-83B, 84A-85B
Grade 5: 56A-56F, 58A-59B, 60A-61B, 62A-63B, 82B-82F, 84A-85B, 86A-87B, 90A-92, 93A-93B, 94A-97B, 98A-99, 101A-101B, 102A-103B

- **Develop fluency and quick recall of multiplication facts and related division facts and fluency with multi-digit multiplication and division**
Grade 3: 106C-106F, 107, 122A-125B, 126A-127B, 128A-129B, 130A-131B, 138A-138F, 138-139, 140A-141B, 142A-143B, 144A-146, 147A-147B, 148A-149B, 150A-151B, 182A-182F, 182-183, 184A-185B, 186A-188, 189A-189B, 190A-191B, 192A-193B, 194A-195B
Grade 4: 52B, 58A-59B, 62A-63B, 64A-65B, 66A-67B, 80A-81B, 84A-85B
Grade 5: 56B-56F, 60A-61B, 64A-65, 67A-67B, 68A-69B, 70A-71B, 72A-73B, 82B-82F, 84A-85B, 94A-97B, 98A-101B, 120A-120F, 122A-123B, 128A-129B, 130A-133B, 134A-135B, 136A-137B

- **Develop the ability to estimate the results of computation with whole numbers, fractions or decimals and be able to judge reasonableness**
Grade 3: 44A-46, 47A-47B, 48, 49, 54, 55, 56, 59, 74A-76, 77A-77B, 79, 146, 185, 207, 215, 221, 223, 267, 283, 307, 354, 394, 414A-415B, 438A-439B, 445
Grade 4: 32A-33B, 100A-101B, 144A-145B, 166A-167B, 294A-299B, 300-302
Grade 5: 30A-31B, 62A-63B, 66, 85, 86A-87B, 89, 130B-131, 133A-133B, 155, 157, 174A-175B, 184A-185B, 265, 297, 352, 353

- **Extend place value concepts to represent and compare both whole numbers and decimals**
Grade 3: 2B-2F, 4A-5B, 6A-7B, 8A-9B, 10A-11B, 12A-14, 15A-15B, 16A-17B, 304C-304F, 304, 306B-307B
Grade 4: 10A-13B, 105, 268A-269B, 270A-272, 273A-273B
Grade 5: 2A-2F, 3, 4A-5B, 6A-9B, 10A-11B, 12A-13B

- **Use benchmarks to help develop number sense**
Grade 3: 282A-283
Grade 4: 222A-223B
Grade 5: 246A-247B

- **Develop an understanding of commonly used fractions, decimals, and percents, including recognizing and generating equivalent representations**
Grade 3: 274A-274F, 274-275, 276A-277B, 278A-279B, 280A-281B, 282A-283B, 284A-286, 287A-287B, 304A-304F, 304-305, 306A-307B, 308A-309, 311A-311B
Grade 4: 214A-214F, 216A-218, 219A-219B, 220A-221B, 224A-226, 227A-227B, 228A-229B, 230A-232, 233A-233B, 266A-266F, 268A-269B, 274A-275B, 276A-278, 279A-279B, 280A-281B
Grade 5: 2B, 2E, 10A-11B, 218A-218F, 219, 220A-221, 223A-223B, 224A-225B, 226A-227B, 228A, 229B, 234A-237B, 238A-241B, 242A-243B, 244A-245B, 394B, 394F, 398A-399B, 400A-401B

- **Develop an understanding of and fluency with addition and subtraction of fractions and decimals**
Grade 3: 294A-295B, 296A-297B, 312A-314, 315A-315B
Grade 4: 248A-248F, 250A-253B, 254A-255B, 256A-257B, 258A-261B, 288B-288F, 289, 296A-299B, 300A-302, 303A-303B, 304A-305B, 306A-307B
Grade 5: 42A-43B, 44A-45B, 254A-254F, 256A-259B, 262A-263B, 264A-265B

Algebra

- **Represent and analyze patterns and relationships involving multiplication and division to introduce multiplicative reasoning**
Grade 3: 15, 122A-124, 125A-125B, 126A-127B, 128A-129B, 130A-131B, 150-151B, 210A-211B, 212A-214, 215A-215B, 219-221, 221B, 412A-413B, 436A-437B
Grade 4: 58A-59B, 126B, 128-129B, 132A-133B, 356A-357B
Grade 5: 77, 122A-123B

- **Identify the commutative, associative, and distributive properties and use them to compute with whole numbers**
Grade 3: 30B, 32A-33B, 95, 110A-112, 113B, 130A-131B, 152A-153B, 425
Grade 4: 26A, 28A-29, 31B, 52B, 52E, 60A-61B
Grade 5: 22A, 24A-26, 27B, 56B, 58A-59B, 60

- **Understand and apply the idea of a variable as an unknown quantity and express mathematical relationships using equations**
Grade 3: 5, 9, 71, 95, 196A-198, 199A-199B, 297, 316A-318, 319A-319B, 331
Grade 4: 126A, 126E, 128A-129B, 130A-131B, 132A-133B, 430C, 430E-430F, 435, 437
Grade 5: 144A-144B, 144D, 146A-147B, 148A-151B, 152A-155B, 374B-374C, 374E, 375, 376A-377B, 378A-379B, 382A-384, 385A-385B, 386A-387B
- **Represent and analyze patterns and functions, using words, tables, and graphs**
Grade 3: 15, 122A-124, 125A-125B, 126A-127B, 128A-129B, 130A-131B, 150-151B, 204A-204F, 204-205, 206A-207B, 208A-209B, 210A-211B, 212A-214, 215A-215B, 218A-221B, 412A-413B, 436A-437B
Grade 4: 58A-59B, 126B-126D, 128-129B, 130-131B, 132A-133B, 356A-357B
Grade 5: 14A-16, 17A-17B, 33, 77, 122A-123B, 148A-151B, 203, 325, 382A-384, 385A-385B, 404A-405B

Geometry and Measurement

- **Describe, analyze and classify two-dimensional and three-dimensional shapes**
Grade 3: 232A-232F, 232-233, 234A-237B, 238A-241B, 246A-247B, 248A-249B, 250A-251B, 252A-253B
Grade 4: 194B-194F, 202A-203B, 204A-205B, 206A-207B, 208A-209B, 344A-344F, 346A-349B, 350A-351B, 352A-353B
Grade 5: 198D, 206A-207B, 208A-209B, 210A-211B, 322A-323, 325A-325B, 326A-327B
- **Explore congruence and similarity**
Grade 3: 258A, 258D, 260A-262, 263A-263B
Grade 4: 446B, 454A-455B
Grade 5: 308, 462B, 472A-473B
- **Predict and describe the results of sliding (translation), flipping (reflection), and turning (rotation) two-dimensional shapes**
Grade 3: 258B, 258E, 260B-263B
Grade 4: 446A, 446C, 446E-446F, 448A-449B, 450A-451B, 452A-453B
Grade 5: 462A-462F, 464A-467B, 468A-469B, 470A-471B, 472A-473B
- **Use ordered pairs on a coordinate grid to describe points or paths (first quadrant)**
Grade 3: 468A-471B
Grade 4: 408A-409B, 410A-411B
Grade 5: 410B, 410E, 414A-416, 417A-417B, 418A-419B, 420A-421B, 436A-439B

- **Use geometric models to solve problems, such as determining perimeter, area, volume, and surface area**
Grade 3: 366A-366F, 368B-369B, 370A, 372B-373B, 376B-377B, 378A-379B, 380A-382, 383A-383B, 384B-385B
Grade 4: 314A-314F, 314-315, 316A-317B, 318A-319B, 320A-323AB, 324A-325B, 326A-327B, 328A-330, 331A-331B, 332A-333B, 334A-335B, 354A-355B
Grade 5: 300B-302, 303A-303B, 304A-305B, 306A-307B, 308A-309B, 332A-333, 335A-335B
- **Select and apply appropriate standard (customary and metric) units and tools to measure length, area, volume, weight, time, temperature, and the size of angles**
Grade 3: 326A-326F, 328A-331B, 332A-333B, 334A-337B, 338A-339B, 340A-341B, 348A-348F, 350A-351B, 352A-354, 355A-355B, 356A-357B, 358A-359B
Grade 4: 200A-201B, 364B-365B, 366B-367B, 368B-369B, 374B-375B, 376B-377B, 378B-379B, 384B-385B, 386B-389B, 390B-391B, 392B-393B,
Grade 5: 204A-205B, 300B-302, 303A-303B, 304A-305B, 306A-307B, 308A-309B, 332A-333, 335A-335B, 348A-349B, 350A-351B, 352A-353B, 358A-361B, 362A-363B, 364A-365B
- **Select and use benchmarks (1/2 inch, 2 liters, 5 pounds, etc.) to estimate measurements**
Grade 3: 328-330, 336, 338, 340, 350-351, 352B-352, 356, 358
Grade 4: 364A-365B, 366A-367B, 368A-369B
Grade 5: 348, 349A-349B, 350A-351B, 352A-353B

Data Analysis and Probability

- **Represent and analyze data using tallies, pictographs, tables, line plots, bar graphs, circle graphs and line graphs**
Grade 3: 456A-456F, 457, 458A-459B, 460A-463B, 464A-465B, 466A-467B, 468A-471B
Grade 4: 400A-400F, 401, 402A-403B, 404A-405B, 406A-407B, 410A-411B, 416A-417B, 418A-419B, 420A-423B
Grade 5: 428B-428F, 430A-431B, 432A-435B, 436A-439B, 440A-443B, 446A-449B, 454A-455B
- **Describe the distribution of the data using mean, median, mode or range**
Grade 3: 459, 461
Grade 4: 412A-413B, 414A-415B
Grade 5: 450A-451B, 452A-453B

- **Propose and justify conclusions and predictions based on data**
Grade 3: 482A-483B
Grade 4: 402A-403B, 404A-405B, 406A-407B, 410A-411B, 412A-413B, 414A-415B, 416A-417B, 418A-419B, 420A-423B, 476A-477B
Grade 5: 428B-428F, 430A-431B, 432A-435B, 436A-439B, 440A-443B, 444A-445B, 446A-449B, 454A-455B, 492A-493B

- **Predict the probability of simple experiments and test the predictions**
Grade 3: 456B, 476A-477B, 478A-481B
Grade 4: 466A-466F, 467, 472A-474, 475A-475B
Grade 5: 486A-487B, 488A-491B, 492A-493

- **Describe events as likely or unlikely and discuss the degree of likelihood using words like certain, equally likely and impossible**
Grade 3: 456B, 472A-475B
Grade 4: 466C, 466E, 472A-474, 475A-475B
Grade 5: 489

**Scott Foresman – Addison Wesley enVisionMATH
to the
Iowa Core Curriculum
Essential Concepts and Skill Sets of the Iowa Core Curriculum**

Grade 6

Middle School

Number and Operation

- **Understand, apply, and be computationally fluent with multiplication and division of fractions and decimals**
Grade 6: 70A-73B, 74A-75B, 76A-77B, 78A-79B, 80A-81B, 184A-184B, 186A-187B, 190A-191B, 192A-193B, 200A-200F, 201, 202A-203B, 204A-205B, 206A-206B, 210A-211B, 212A-213B
- **Understand, apply, and be computationally fluent with rational numbers, including negative numbers**
Grade 6: 150A-151, 152A-152B, 220A-220F, 222A-223B, 230A-233B, 234A-236, 237A-237B, 238A-239B, 240A-241B, 242A-245B
- **Understand and apply ratio and rate, including percents, and connect ratio and rate to fractions and decimals**
Grade 6: 298A, 300A-301B, 302A-305B, 306A-307B, 308A-309B, 310A-313B, 322A-323B, 324A-325B, 343, 344A-345B
- **Understand and apply proportional reasoning**
Grade 6: 298B, 302A-305B, 320B, 322A-323B, 324A-325B, 326A-327B, 330A-332, 333A-333B, 334A-337B
- **Understand, estimate, and represent real numbers, including common irrational numbers and use of scientific notation**
Grade 6: 2A-2F, 4A-7B, 10A-12, 13A-13B, 14A-17B, 82A-83B, 128A-129B, 150A-151B, 153A-154B, 222A-223B, 226A-229B,

Algebra

- **Write, interpret, and use mathematical expressions, find equivalent forms, and relate such symbolic representations to verbal and tabular representations**
Grade 6: 32A-33B, 34A-35B, 36A-39B, 40A-41B, 42A-45B, 46A-47B, 48A-49B, 50A-53B, 169, 245

- **Understand and apply proportionality**
Grade 6: 298B, 302A-305B, 320B, 322A-323B, 324A-325B, 326A-327B, 330A-332, 333A-333B, 334A-337B
- **Understand, solve, and apply linear equations and inequalities**
Grade 6: 13, 96A-97B, 98A-101B, 102A-105B, 106A-108, 109A-109B, 110-113B, 212A-213B, 242A-244, 245A-245B, 315, 337, 357, 370A-370F, 371, 372A-375B, 376A-377B, 378A-379B, 380A-381B, 382A-385B, 389, 479
- **Understand and apply linear functions**
Grade 6: 386A-388, 389A-389B, 461
- **Use tables and graphs to analyze systems of linear equations**
Grade 6: 381A

Geometry and Measurement

- **Understand, determine, and apply area of polygons**
Grade 6: 424A, 424C, 424E, 430B—433B, 434-437B
- **Understand and apply similarity, with connections to proportion**
Grade 6: 330A-333B
- **Understand, determine, and apply surface areas and volume of prisms and cylinders and circumference and area of circles**
Grade 6: 438A-440, 441A-441B, 442A-443B, 447, 458A-460, 461A-461B, 462A-463B, 464A-465B
- **Analyze two-dimensional space and figures by using distance, angle, coordinates, and transformations**
Grade 6: 256, 248-249, 249B, 264, 272, 274A-277B, 278A-281B, 282A-283B, 284A-287B, 290A-291B,
- **Visualize, represent, and describe three-dimensional shapes**
Grade 6: 452A, 452C, 542E, 453, 454A-456, 457A-457B

Data Analysis and Probability

- **Understand, interpret, determine, and apply measures of center and graphical representations of data**
Grade 6: 474B-474F, 475, 476A-79B, 480A-483B, 484A-487B, 488A-489B, 490A-493B, 494A-497B, 498A-499B, 500A-501B, 502A-505B, 506A-509B, 510A-511B

- **Understand and represent simple probabilistic situations**
Grade 6: 518A-518F, 519, 520A-523B, 524A-526, 527A-527B
- **Use proportions and percentages to analyze data and chance**
Grade 6: 528A-529B, 530A-532, 533A-533B,
- **Analyze and summarize data sets, including initial analysis of variability**
Grade 6: 518A-518F, 519, 520A-523B, 524A-526, 527A-527B
- **Understand, compute, and estimate simple probabilities using counting strategies and simulation**
Grade 6: 518A-518F, 519, 520A-523B, 524A-526, 527A-527B 528A-529B, 530A-532, 533A-533B,