

A Correlation of

Scott Foresman • Addison Wesley

en**Vision**MATH™

to the

Hawaii
Content and Performance
Standards III

Grades K–6

PEARSON

M/M-133

Introduction

This correlation shows the close alignment between **Scott Foresman – Addison Wesley enVisionMATH**, to the *Hawaii Content and Performance Standards III*. Correlation page references are to the Teacher's Edition. Lessons in the Teacher's Edition include facsimile pages of the 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 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 teacher to rearrange into a personalized curriculum that matches the sequence preferred by your class, school, or district. The curriculum is designed so that all standards can be taught before the major test.

Instructional Design

enVisionMATH™ teaches for understanding using research-based best practices. Essential understandings are connected by Big Ideas 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. 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 exercised to help students focus on one idea at a time and see the connections within the sequence of ideas. Guiding questions in blue type help you guide your students through the examples 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. All can be used over and over due to the inclusion of a "Try Again" at the end, can be used for ongoing review and used year after year. For each topic, 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 | 1 |
| Grade One | 5 |
| Grade Two | 9 |
| Grade Three | 14 |
| Grade Four | 20 |
| Grade Five | 26 |
| Grade Six | 32 |

**Scott Foresman – Addison Wesley enVisionMATH
to the
Hawaii Content and Performance Standards III
Kindergarten**

Strand: Numbers and Operations

Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Numbers and Number Systems

Benchmark MA.K.1.1 Count and compare groups of objects up to 30 according to the number of objects in each group

51–52, 55–56, 59–60, 63–68, 75–78, 81–84, 87–90, 95–96, 101–110, 213–220, 289–290

Benchmark MA.K.1.2 Represent whole numbers up to 30 in flexible ways (e.g., relating, composing, and decomposing numbers)

51–52, 55–56, 59–62, 65–68, 75–78, 81–84, 87–92, 95–96, 109–110, 213–220

Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other

Operations

Benchmark MA.K.2.1 Demonstrate addition as "putting together" or "combining sets"

177–182, 185–186, 189–190

Benchmark MA.K.2.2 Demonstrate subtraction as "taking away," "separating sets," or "counting back"

195–200, 203–204, 207–208

Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation

Computational Fluency

Benchmark MA.K.3.1 Use a variety of strategies (e.g., objects, fingers) to add and subtract single-digit whole numbers

183–184, 185–186, 187–188, 189–190, 201–202, 203–204, 205–206, 207–208

Strand: Measurement

Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring

Measurement Attributes and Units

Benchmark MA.K.4.1 Compare and order objects according to length, weight, capacity, area, and volume

153–158, 163–164, 167–168

Benchmark MA.K.4.2 Identify the value of pennies, nickels, and dimes and the equivalence among them (e.g., 5 pennies = 1 nickel)

237–238, 239–240, 241–242, 243–244

Benchmark MA.K.4.3 Tell time to the hour

261–262

Measurement Tools and Techniques

Benchmark MA.K.4.4 Identify tools used to measure time (i.e., digital and analog clock, calendar)

259–262, 277–280

Strand: Geometry and Spatial Sense

Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS: Analyze properties of objects and relationships among the properties

Geometric Shapes and Their Properties and Relationships

Benchmark MA.K.5.1 Identify common geometric shapes (e.g., circle, square, rectangle, triangle)

115–116, 117–118, 119–120, 121–122

Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY: Use transformations and symmetry to analyze mathematical situations

Transformation

Benchmark MA.K.6.1 Use slides, flips, and turns to solve puzzles

See Grade 1.

Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics

There are no benchmarks for this standard for this Grade/Course.

Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry
Coordinate Geometry

Benchmark MA.K.8.1 Use positional words to describe an object's location (e.g., up, down, above, under, inside, outside)
17–18, 19–20, 21–22, 12–24, 25–26, 27–28

Strand: Patterns, Functions, and Algebra

Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships

Patterns

Benchmark MA.K.9.1 Demonstrate repeating patterns involving shapes, objects, sounds, and movements
33–34, 35–36, 37–38, 39–40, 41–42, 43–44, 45–46

Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations

Numeric and Algebraic Representations

Benchmark MA.K.10.1 Represent simple numerical situations with objects and number sentences
109–110, 181–188, 197, 199, 201–208

Strand: Data Analysis, Statistics, and Probability

Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA: Pose questions and collect, organize, and represent data to answer those questions

Data Collection and Representation

Benchmark MA.K.11.1 Sort objects or people according to stated attributes
3–4, 5–6, 7–8, 9–10, 11–12, 293–294, 297

Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis

There are no benchmarks for this standard for this Grade/Course.

Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data

There are no benchmarks for this standard for this Grade/Course.

Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability

There are no benchmarks for this standard for this Grade/Course.

**Scott Foresman – Addison Wesley enVisionMATH
to the
Hawaii Content and Performance Standards III**

Grade One

Strand: Numbers and Operations

Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Numbers and Number Systems

Benchmark MA.1.1.1 Count whole numbers up to 100 in a variety of ways (e.g., skip counts by 2's, 5's, 10's)

26, 40–41, 271–274, 275–278, 279–282, 293, 335–338, 343–346

Benchmark MA.1.1.2 Identify representations of simple fractions (e.g., one-half, one-third, one fourth)

593–603

Benchmark MA.1.1.3 Represent whole numbers up to 100 in flexible ways (e.g., relating, composing, and decomposing numbers), including the use of tens as a unit

3–6, 7–10, 11–14, 15–18, 19–22, 51–54, 55–58, 59–62, 119–122, 123–126, 127–130, 131–134, 263–266, 283–286, 303–306, 307–310, 311–314, 315–318, 319–322

Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other

Operations

Benchmark MA.1.2.1 Demonstrate that addition and subtraction of whole numbers can undo each other

107–110, 179–186, 517–520, 521–524, 525–528

Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation

Computational Fluency

Benchmark MA.1.3.1 Recall single-digit addition facts

143–146, 147–150, 151–154, 155–158, 159–162, 481–492, 497–504

Benchmark MA.1.3.2 Use a variety of strategies to solve number problems involving addition and subtraction (e.g., comparing sets, counting on, counting backwards, doubles, doubles plus one)

57, 99–106, 141, 147–154, 175–178, 179–182, 183–186, 479, 481–484, 485–488, 489–492, 525–528

Strand: Measurement

Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring

Measurement Attributes and Units

Benchmark MA.1.4.1 Measure with multiple copies of standard (e.g., inch tiles, foot-long lengths of string) or non-standard (e.g., paper clips, pencils) units of the same size

399–402, 403–406

Benchmark MA.1.4.2 Identify the value of coins and count coin combinations (using like coins) to a dollar

367–370, 361–374, 375–378, 379–382, 383–386

Benchmark MA.1.4.3 Tell time to the half-hour and quarter-hour

457–460, 461–464

Measurement Tools and Techniques

Benchmark MA.1.4.4 Identify measurement tools that could be used to measure length, capacity, and weight

407–414, 423–430, 435–442

Strand: Geometry and Spatial Sense

Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS: Analyze properties of objects and relationships among the properties

Geometric Shapes and Their Properties and Relationships

Benchmark MA.1.5.1 Identify basic three-dimensional geometric solids (e.g., cube, sphere, rectangular prism)

227–230

Benchmark MA.1.5.2 Identify attributes and parts of common two– and three– dimensional shapes

195–198, 199–202, 231–234

Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY: Use transformations and symmetry to analyze mathematical situations**Symmetry****Benchmark MA.1.6.1 Identify symmetrical shapes found in the real world**

193C, 193D, 219 (TE)

Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics*There are no benchmarks for this standard for this Grade/Course.***Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS:** Select and use different representational systems, including coordinate geometry**Coordinate Geometry****Benchmark MA.1.8.1 Use directional words to locate an object or place (e.g., left, right, near, far)**

211–214, 553–556

Strand: Patterns, Functions, and Algebra**Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS:** Understand various types of patterns and functional relationships**Patterns****Benchmark MA.1.9.1 Extend, create, and describe repeating patterns**

205, 213, 229, 233, 243–246, 247–250, 251–254, 255–257

Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations

Numeric and Algebraic Representations

Benchmark MA.1.10.1 Use objects, pictures, words, and number sentences to represent and solve numerical problem situations involving addition and subtraction

75–77, 111–114, 163–166, 187–189, 533–536, 601–604

Strand: Data Analysis, Statistics, and Probability

Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA: Pose questions and collect, organize, and represent data to answer those questions

Data Collection and Representation

Benchmark MA.1.11.1 Collect and organize information using concrete objects and pictures

541, 557–560, 561–565, 566–568, 569–572

Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis

Data Interpretation

Benchmark MA.1.12.1 Interpret data using simple language (e.g., more, less, fewer, equal)

541–544, 545–548, 549–552, 558–560, 565–572

Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data

There are no benchmarks for this standard for this Grade/Course.

Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability

There are no benchmarks for this standard for this Grade/Course.

Scott Foresman – Addison Wesley enVisionMATH
to the
Hawaii Content and Performance Standards III
Grade Two

Strand: Numbers and Operations

Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Numbers and Number Systems

Benchmark MA.2.1.1 Represent whole numbers up to 1000 in flexible ways (e.g., relating, composing, and decomposing numbers), including the use of tens and hundreds as units

99–102, 103–105, 107–110, 511–514, 515–518, 519–522, 523–525

Benchmark MA.2.1.2 Compare whole numbers up to 1000 using words (e.g., greater than, less than, equal to)

111–114, 115–118, 531–534

Benchmark MA.2.1.3 Represent fractions with denominators no larger than ten using pictures, numbers, words, or models

355–358, 359–362, 367–370, 371–374

Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other

Operations

Benchmark MA.2.2.1 Recognize situations involving addition and subtraction and represent the situation with a number sentence

4–6, 7–10, 11–14, 15–18, 19–22, 23–26, 27–29, 63–66, 91–94, 243–245, 275–278

Benchmark MA.2.2.2 Demonstrate multiplication as repeated addition of equal groups

591–594

Benchmark MA.2.2.3 Demonstrate division as "separating equal groups"

619–622

Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation

Computational Fluency

Benchmark MA.2.3.1 Recall addition facts and their corresponding subtraction facts up to twenty

35–38, 39–42, 43–46, 55–62, 71–74, 75–78, 79–82, 83–86

Benchmark MA.2.3.2 Use a variety of strategies to solve problems involving addition and subtraction of two-digit numbers

171–174, 175–178, 179–182, 183–186, 223–226, 227–230, 231–234, 235–238, 239–241, 242–245, 255–258, 259–262, 263–266, 267–270, 271–274, 275–278

Benchmark MA.2.3.3 Estimate the solution of addition and subtraction problems

287–290, 299–302, 555–558, 571–574

Strand: Measurement

Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring

Measurement Attributes and Units

Benchmark MA.2.4.1 Measure length using inches, feet, and centimeters

391–394, 395–398

Benchmark MA.2.4.2 Identify appropriate units for measuring length, area, capacity, and weight

391–398, 403–406, 423–430, 435–442

Benchmark MA.2.4.3 Estimate and measure temperature using standard units (e.g., Fahrenheit, Celsius)

467–470

Benchmark MA.2.4.4 Tell time to the minute

These pages can be used to develop this Benchmark.

451–454

Benchmark MA.2.4.5 Represent a given monetary amount using a variety of combinations of coins and bills

155–158, 163–165

Measurement Tools and Techniques

Benchmark MA.2.4.6 Identify objects or visual benchmarks that could be used in place of standard units when estimating
383–386, 387–390, 391–394, 395–397

Strand: Geometry and Spatial Sense

Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS:
Analyze properties of objects and relationships among the properties

Geometric Shapes and Their Properties and Relationships

Benchmark MA.2.5.1 Compare and sort two– and three–dimensional shapes according to selected attributes
315–318, 319–322

Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY:
Use transformations and symmetry to analyze mathematical situations

Transformation

Benchmark MA.2.6.1 Demonstrate flips, slides, and turns by moving shapes
335–338

Symmetry

Benchmark MA.2.6.2 Recognize line symmetry in plane figures and create pictures with line symmetry
339–342

Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics

There are no benchmarks for this standard for this Grade/Course.

Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry

Coordinate Geometry

Benchmark MA.2.8.1 Use cardinal directions that describe the location of an object or place (i.e., north, south, east, or west) on a coordinate map

These pages can be used to develop this Benchmark.

491–494

Strand: Patterns, Functions, and Algebra

Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships

Patterns

Benchmark MA.2.9.1 Describe and create addition and subtraction number patterns (e.g., [20, 17, 14, ...])

173, 187–190, 543–546

Benchmark MA.2.9.2 Use different forms (e.g., concrete, pictorial, numerical) to represent the same basic pattern

173, 99–102, 591–594, 595–598

Benchmark MA.2.9.3 Demonstrate and explain the difference between repeating patterns and growing patterns

Related content:

173, 187–190, 543–546, 591–594

See also, Grade 1.

Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations

Numeric and Algebraic Representations

Benchmark MA.2.10.1 Create a word/story problem for a given number sentence

599–602, 627–630

Strand: Data Analysis, Statistics, and Probability

Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA: Pose questions and collect, organize, and represent data to answer those questions

Data Collection and Representation

Benchmark MA.2.11.1 Pose questions, collect data, and display the data using a graph (e.g., bar graphs, pictographs)

479–482, 483–486, 487–490, 506, 583–586

Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis

Data Interpretation

Benchmark MA.2.12.1 Interpret data displayed in a bar graph and describe how the important features of the data set are represented in a bar graph

479–482, 487–490, 503–506

Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data

There are no benchmarks for this standard for this Grade/Course.

Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability

There are no benchmarks for this standard for this Grade/Course.

**Scott Foresman – Addison Wesley enVisionMATH
to the
Hawaii Content and Performance Standards III**

Grade Three

Strand: Numbers and Operations

Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Number and Number Systems

Benchmark MA.3.1.1 Represent place value from hundredths to ten–thousands flexibly

4–5, 6–7, 8–9, 10–11

Benchmark MA.3.1.2 Categorize and justify a number as being odd or even

122

Benchmark MA.3.1.3 Compare and order fractions with denominators up to 12 (e.g., greater than, less than, equal)

288–293

Benchmark MA.3.1.4 Use fractions with denominators up to 12 to solve problems

278–283, 286–290, 292–297

Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other

Operations

Benchmark MA.3.2.1 Recognize situations involving multiplication and division of whole numbers and represent the situation with a number sentence

114–120, 132–133, 154–156, 164–169, 172–173, 196–198, 426–429, 448–450

Benchmark MA.3.2.2 Select and apply various meanings and representations of multiplication and division

108–109, 110–112, 114–115, 116–117, 164–165, 166–168, 170–171, 172–173

Benchmark MA.3.2.3 Demonstrate that multiplication and division of whole numbers can undo each other

184–185, 186–188, 190–191, 192–193, 194–195, 196–197

Operation Properties

Benchmark MA.3.2.4 Use properties of addition of whole numbers (e.g., associative, commutative) to solve problems

33, 95

Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation

Computational Fluency

Benchmark MA.3.3.1 Recall multiplication facts from 0×0 to 10×10

108–112, 114–117, 122–124, 128–131, 144–146

Benchmark MA.3.3.2 Use a variety of strategies to solve problems involving addition and subtraction of two- and three-digit numbers

33–39, 44–46, 48–52, 56–57, 68–70, 72–76, 86–89, 90–94, 96–97

Estimation

Benchmark MA.3.3.3 Estimate the results of whole-number computations

44–46, 48, 54, 56, 59, 74–76, 79, 146, 207, 215, 221, 223, 267, 354, 394, 414–415, 445, 438–439

Strand: Measurement

Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring

Measurement Attributes and Units

Benchmark MA.3.4.1 Describe the concept of area and volume and the appropriate units for each

376–383

Benchmark MA.3.4.2 Measure area and volume using standard and non-standard units (e.g., tiles, index cards, grids, cubes)

376–383

Benchmark MA.3.4.3 Measure length, capacity, and weight in U.S. customary and metric units (e.g., pound, kilogram)

328–331, 332–333, 334–337, 338–339, 340–341, 350–351, 352–354, 356–357, 358–359

Benchmark MA.3.4.4 Estimate and determine the elapsed time between two events or times

400–401

Measurement Tools and Techniques**Benchmark MA.3.4.5 Select appropriate tools for measuring length, capacity, and weight**

328–331, 332–333, 334–337, 338–339, 340–341, 350–351, 352–354, 356–357, 358–359

Benchmark MA.3.4.6 Estimate and measure perimeter and area of common shapes and irregular (e.g., a house-shaped pentagon) shapes

368–373, 376–379

Strand: Geometry and Spatial Sense

Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS:
Analyze properties of objects and relationships among the properties

Geometric Shapes and Their Properties and Relationships**Benchmark MA.3.5.1 Compare the basic properties of isosceles, equilateral, and right triangles**

246–248

Benchmark MA.3.5.2 Classify shapes as congruent or similar

260–262

Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY:
Use transformations and symmetry to analyze mathematical situations

Transformation**Benchmark MA.3.6.1 Predict and confirm the result of flipping, sliding, and turning shapes**

260–263

Benchmark MA.3.6.2 Use flips, slides, and turns to show that a shape or design is symmetrical

264–267

Symmetry

Benchmark MA.3.6.3 Recognize rotational symmetry of plane figures

These pages may be used to develop this Benchmark.

260–263, 264–267

Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics

There are no benchmarks for this standard for this Grade/Course.

Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry

Coordinate Geometry

Benchmark MA.3.8.1 Use coordinates to locate objects/locations on a grid

468–470

Strand: Patterns, Functions, and Algebra

Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships

Patterns

Benchmark MA.3.9.1 Create and describe growing numerical and spatial patterns and generalize a rule for the pattern

119–120, 208–214, 218–221, 298–299, 360–361

Patterns

Benchmark MA.3.9.2 Use patterns to solve problem situations involving related quantities in which one quantity changes as the other changes

119–120, 210–214, 218–221, 298–299, 360–361

Benchmark MA.3.9.3 Identify and describe patterns in a hundreds chart
34–35

Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION:
Use symbolic forms to represent, model, and analyze mathematical situations

Numeric and Algebraic Representations

Benchmark MA.3.10.1 Model situations that involve multiplication and division of whole numbers using objects/pictures and number sentences
110–113, 116–118, 143, 144–146, 149, 164–167, 174–176, 196–198, 426–428

Rates of Change

Benchmark MA.3.10.2 Identify situations involving change and describe the change numerically and verbally
211, 218–221, 468, 470–471

Strand: Data Analysis, Statistics, and Probability

Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA:
Pose questions and collect, organize, and represent data to answer those questions

Data Collection and Representation

Benchmark MA.3.11.1 Pose questions, collect data using surveys, and organize the data into tables and graphs
24–25, 458–459, 464–471, 476–480, 482–483

Benchmark MA.3.11.2 Organize and represent data in more than one way (e.g., tallies, chart, tables, bar graphs, line plots, line graphs)
24–25, 458–459, 464–471, 476–480, 482–483

Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis

Data Interpretation

Benchmark MA.3.12.1 Interpret data (e.g., tallies, chart, tables, bar graphs, line plots) and state what the representation shows about the set of data
460–463, 464–465, 466–467, 468–471, 472–475, 476–477, 478–481, 482–483

Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data

Predictions and Inferences

Benchmark MA.3.13.1 Answer questions based on data represented in graphs
460–463, 464–465, 466–467, 468–471, 482–483

Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability

Probability

Benchmark MA.3.14.1 Make reasonable predictions concerning the likelihood of an event occurring (e.g., certain, likely, unlikely, impossible)
472–477

**Scott Foresman – Addison Wesley enVisionMATH
to the
Hawaii Content and Performance Standards III**

Grade Four

Strand: Numbers and Operations

Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Numbers and Number Systems

Benchmark MA.4.1.1 Identify place value from ten–thousandths to millions
4–6, 8–13, 268–269

Benchmark MA.4.1.2 Identify and list factors, multiples, prime numbers, and composite numbers
58, 62–67, 96–97, 182–185

Benchmark MA.4.1.3 Identify equivalent forms of commonly used fractions and decimals
224–226, 274–275

Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other

Operations

Benchmark MA.4.2.1 Describe situations involving addition and subtraction of fractions and decimals
250–253, 254–255, 256–257, 258–260, 300–302

Operation Properties

Benchmark MA.4.2.2 Use associative, commutative, and distributive properties as they apply to operations involving whole numbers
28–29, 60–63

Benchmark MA.4.2.3 Apply the properties of zero and one as they relate to addition, subtraction, multiplication, and division
28–29, 60–63

Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation

Computational Fluency

Benchmark MA.4.3.1 Recall all multiplication facts and the corresponding division facts up to 12×12

58–59, 62–67, 80–81, 84–85

Benchmark MA.4.3.2 Select and use appropriate strategies and/or tools (e.g., mental math, calculators, paper/pencil, standard algorithms) for computing whole numbers

28–33, 36–43, 62–67, 82–85, 89, 98–101, 106–108, 110–112, 114–115, 119, 142–155, 164–165, 166–167, 168–169, 170–172, 174–176, 178–179, 180–181

Benchmark MA.4.3.3 Use a variety of strategies to add and subtract fractions with like and unlike denominators

250–253, 254–255, 256–257, 258–260

Benchmark MA.4.3.4 Add and subtract decimals to 3 places

294–302

Estimation

Benchmark MA.4.3.5 Determine the reasonableness of numerical solutions

101–104, 166, 223, 294, 299, 323

Strand: Measurement

Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring

Benchmark MA.4.4.1 Explain the need to use standard units for measuring

These pages can be used to develop this Benchmark.

316–317, 364–369, 374–379

Benchmark MA.4.4.2 Select and apply appropriate customary and metric units and tools to measure length, perimeter, and area for the degree of accuracy needed

318–319, 320–322, 324–325, 326–327, 328–330, 332–333, 334–335, 364–365, 374–375

Benchmark MA.4.4.3 Classify right angles, acute angles, obtuse angles, and straight angles

198–201

Benchmark MA.4.4.4 Estimate and measure surface area and volume using U.S. customary units and metric units

354–355

Measurement Formulas**Benchmark MA.4.4.5 Use known measurements to calculate desired measurements of squares and rectangles (e.g., use the length of the square to calculate its area and perimeter)**

318–319, 328–330, 332–335

Strand: Geometry and Spatial Sense**Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS:**
Analyze properties of objects and relationships among the properties**Geometric Shapes and Their Properties and Relationships****Benchmark MA.4.5.1 Classify different types of triangles and quadrilaterals according to their properties and identify the properties that define the classifications**

202–203, 204–205, 206–207, 208–209, 213

Benchmark MA.4.5.2 Describe lines in the plane (i.e., parallel, perpendicular, intersecting)

196–199, 212

Benchmark MA.4.5.3 Compare points, lines, line segments, and rays

196–199, 212

Benchmark MA.4.5.4 Predict and confirm the results of putting together and taking apart two- and three-dimensional shapes

320–321, 336–337

Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY: Use transformations and symmetry to analyze mathematical situations

Transformation

Benchmark MA.4.6.1 Use flips, slides, and turns to determine if two figures are congruent
454–455

Symmetry

Benchmark MA.4.6.2 Locate the plane of symmetry in three–dimensional objects
These pages can be used to develop this Benchmark.
456–457

Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics

Visualization and Spatial Reasoning

Benchmark MA.4.7.1 Predict the three–dimensional object that will result from folding a two–dimensional net of the object and justify the prediction
346–348, 350–351

Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry

Coordinate Geometry

Benchmark MA.4.8.1 Use ordered pairs to plot points on a coordinate grid
408–409

Strand: Patterns, Functions, and Algebra

Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships

Patterns

Benchmark MA.4.9.1 Extend, create, and generalize growing and shrinking numeric and geometric patterns (including multiplication patterns)
130–133, 209, 356–357

Function

Benchmark MA.4.9.2 Represent the relationship between quantities in a variety of forms (e.g., manipulatives, tables, pictures, symbols)

10–13, 128–133, 270–272, 336–338, 412–413, 418–419

Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION:
Use symbolic forms to represent, model, and analyze mathematical situations

Numeric and Algebraic Representations

Benchmark MA.4.10.1 Use symbols to represent unknown quantities in open sentences and determine the unknown quantities

44–46, 86–88, 116–118, 258–260, 318–319, 324–335, 434–437

Benchmark MA.4.10.2 Represent the commutative, associative, and distributive properties symbolically

28–29, 60–62

Rates of Change

Benchmark MA.4.10.3 Describe the rate of change numerically and verbally based on data recorded in a table or graph

410–411

Strand: Data Analysis, Statistics, and Probability

Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA:
Pose questions and collect, organize, and represent data to answer those questions

Data Collection and Representation

Benchmark MA.4.11.1 Pose questions, collect data using observations and experiments, and organize the data into tables or graphs

402–403, 406–407, 410–411, 420–423, 470–474, 476–477

Benchmark MA.4.11.2 Label the parts of a graph (e.g., axes, scale, legend, title)

420–422

Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis

Data Interpretation

Benchmark MA.4.12.1 Compare related data sets (e.g., height of 4th grade boys vs. height of 4th grade girls) with an emphasis on how the data are distributed
412–417

Benchmark MA.4.12.2 Analyze important features in the shape of the graph of a data set
410–411

Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data

Predictions and Inferences

Benchmark MA.4.13.1 Propose and justify conclusions/predictions based on data
404–407, 410–411, 412–413, 414–415, 416–417, 418–419, 472–474, 476–477

Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability

Probability

Benchmark MA.4.14.1 Predict the probability of outcomes of simple experiments (e.g., coin toss, 4-colored spinner) and test the predictions
470–474

**Scott Foresman – Addison Wesley enVisionMATH
to the
Hawaii Content and Performance Standards III**

Grade Five

Strand: Numbers and Operations

Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Numbers and Number Systems

Benchmark MA.5.1.1 Represent percent and ratio using pictures or objects
396–400

Benchmark MA.5.1.2 Use equivalent forms of whole numbers, fractions, ratios, decimals, and percents to solve problems
10–11, 228–229, 236, 240, 396–398, 400–401

Benchmark MA.5.1.3 Use models, benchmarks, and equivalent forms to judge the size of fractions and order them
230–231, 246–247

Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other

Operations

Benchmark MA.5.2.1 Apply the inverse relationship between addition and subtraction, and multiplication and division, to solve problems
133, 181, 183, 286–287, 376–379

Benchmark MA.5.2.2 Describe situations involving multiplication and division of fractions and decimals
170–173, 176–181, 184–187, 278–281, 286–287

Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation

Computational Fluency

Benchmark MA.5.3.1 Multiply decimals up to 3 places and divide decimals by whole numbers

176–177, 180–181, 184–185

Benchmark MA.5.3.2 Use a variety of strategies to multiply and divide fractions

278–281, 286–287

Strand: Measurement**Standard 4: Measurement:** FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring**Measurement Attributes and Units****Benchmark MA.5.4.1 Convert simple units within a system of measurement (e.g., millimeters to centimeters, feet to yard, quarts to gallons, gram to kilogram, minutes to hours, days to weeks)**

354–355, 356–357, 358–360, 362–363

Benchmark MA.5.4.2 Select and apply appropriate customary and metric units and tools to measure angles

204–205

Measurement Tools and Techniques**Benchmark MA.5.4.3 Use map scales to measure the distance between locations and make simple scale drawings**

See Grade 6.

Benchmark MA.5.4.4 Estimate and measure the size of an angle

204–205

Measurement Formulas**Benchmark MA.5.4.5 Use known measurements (e.g., base and height) to calculate desired measurements (e.g., area) of triangles, parallelograms, and trapezoids**

300–302, 304–309

Benchmark MA.5.4.6 Use known measurements (e.g., length, width, and height) to calculate desired measurements (e.g., surface area and volume) of rectangular solids

328–329, 332–334

Strand: Geometry and Spatial Sense

Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS:
Analyze properties of objects and relationships among the properties

Geometric Shapes and Their Properties and Relationships

Benchmark MA.5.5.1 Describe the properties that define classifications of three-dimensional shapes (e.g., cylinders have two bases that are circles)
322–327

Benchmark MA.5.5.2 Apply the understanding that the sum of the measures of the angles in any triangle is 180°
208–209

Benchmark MA.5.5.3 Classify angles (no larger than 180°) as acute, right, obtuse, or straight
204–205

Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY:
Use transformations and symmetry to analyze mathematical situations

Transformation

Benchmark MA.5.6.1 Predict and confirm the results of combinations of flips, turns, and slides
464–471

Symmetry

Benchmark MA.5.6.2 Identify three-dimensional objects that have rotational symmetry and locate the rotational axis
470B (Earth named as an object spinning on its axis)

Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics

Visualization and Spatial Reasoning

Benchmark MA.5.7.1 Use two-dimensional nets of rectangular solids to solve surface area problems
328–329

Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry

Coordinate Geometry

Benchmark MA.5.8.1 Determine the distance between points along horizontal and vertical lines of a coordinate system

418–419

Strand: Patterns, Functions, and Algebra

Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships

Patterns

Benchmark MA.5.9.1 Analyze patterns and functions and use generalizations to make reasonable predictions

14–15, 22, 33, 105, 148–150, 203, 213, 382–384, 404–405

Function

Benchmark MA.5.9.2 Describe situations in which the relationship between two quantities vary directly or inversely

148–150, 213, 354–357, 382–384, 396–397, 404–405

Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations

Numeric and Algebraic Representations

Benchmark MA.5.10.1 Use a variety of strategies to solve number sentences with unknowns

34–35, 74–75, 96, 110–111, 288–289, 376–379, 382–384, 386–387

Benchmark MA.5.10.2 Model problem situations with objects or manipulatives and use representations (e.g., graphs, tables, equations) to draw conclusions

34–35, 74–75, 90–91, 110–111, 162–163, 212–213, 270–271, 288–289, 340–341, 366–367, 382–384, 386–387, 432–439, 444–448, 454–455, 478–479, 488–490, 492–495

Rates of Change

Benchmark MA.5.10.3 Describe situations with constant or varying rates (e.g., miles per hour, items per box)

396–397, 436–439, 494–495

Strand: Data Analysis, Statistics, and Probability

Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA: Pose questions and collect, organize, and represent data to answer those questions

Data Collection and Representation

Benchmark MA.5.11.1 Collect and display data in circle graphs

446–449

Benchmark MA.5.11.2 Recognize the difference in representing numeric data and categorical data and select appropriate representations to display each type of data

443

Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis

Data Interpretation

Benchmark MA.5.12.1 Determine the range, median, mode, and mean for a data set

450–453

Benchmark MA.5.12.2 Compare different representations of the same data and evaluate how well each representation shows important aspects of the data

430–431, 434–437, 439–441, 443, 444–448, 454–455

Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data

Predictions and Inferences

Benchmark MA.5.13.1 Design studies to further investigate the conclusion/predictions made based on data

These pages can be used to develop this benchmark.

430–431, 492–493

Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability

Probability

Benchmark MA.5.14.1 Use fractions, decimals, and percents to indicate the probability of events

488–493

Benchmark MA.5.14.2 Determine all possible outcomes of a simple compound event

486–487, 488–490, 492–493, 494–495

**Scott Foresman – Addison Wesley enVisionMATH
to the
Hawaii Content and Performance Standards III**

Grade Six

Strand: Numbers and Operations

Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems

Numbers and Number Systems

Benchmark MA.6.1.1 Compare and order fractions, decimals, and percents
22–23, 226–229, 349

Benchmark MA.6.1.2 Explain and give examples of number theory concepts (e.g., prime factorization, common factors, greatest common factor, common multiples, least common multiple, divisibility)
120–121, 124–127, 135, 150, 163–165, 167, 299, 303

Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other

Operation

Benchmark MA.6.2.1 Apply the order of operations when calculating with whole numbers
36–37

Operation Properties

Benchmark MA.6.2.2 Use the operation properties to simplify computations with fractions, decimals, and percents
80–81, 192–193

Standard 3: Numbers and Operations:

Estimation

Benchmark MA.6.3.1 Use estimation prior to computing with fractions and decimals and compare the estimation to the actual result
62–68, 71, 74–79, 172–176, 188–189, 208–211

Benchmark MA.6.3.2 Recognize situations in which it is more appropriate to estimate than to compute an exact answer

62–63, 66–68, 170–171, 188–189, 208–209, 411

Strand: Measurement

Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring

Measurement Attributes and Units

Benchmark MA.6.4.1 Estimate the circumference and area of a circle (with no reference to a formula)

442

Benchmark MA.6.4.2 Construct angles with a given degree measure

266–268

Measurement Formulas

Benchmark MA.6.4.3 Apply strategies and formulas to solve area and perimeter problems involving polygons (e.g., regular hexagons) and complex shapes (i.e., shapes composed of two or more common shapes)

426–428, 430–433, 434–437

Strand: Geometry and Spatial Sense

Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS: Analyze properties of objects and relationships among the properties

Geometric Shapes and Their Properties and Relationships

Benchmark MA.6.5.1 Analyze and describe the relationships among the angles, side lengths, perimeters, and areas of similar geometric figures

330–331, 333, 429

Benchmark MA.6.5.2 Create arguments for proving that two shapes are congruent

284–285

Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY: Use transformations and symmetry to analyze mathematical situations

Symmetry

Benchmark MA.6.6.1 Use line symmetry and rotational symmetry to describe classifications of shapes (e.g., squares have 4 lines of symmetry and 90° rotational symmetry)

288–289, 294

Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics

Visualization and Spatial Reasoning

Benchmark MA.6.7.1 Construct a two–dimensional representation from different angles of a three–dimensional object

454–456, 458–459

Benchmark MA.6.7.2 Draw two–dimensional shapes with specified properties

278, 280

Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry

Coordinate Geometry

Benchmark MA.6.8.1 Predict the shape that is formed by connecting the points represented by given coordinates

248

Benchmark MA.6.8.2 Use coordinate geometry to represent and analyze properties of geometric shapes

248, 284–286

Strand: Patterns, Functions, and Algebra

Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships

Patterns

Benchmark MA.6.9.1 Represent visual and numerical patterns with tables and graphs and generalize the "rule" using words and symbols

48–51, 290–291, 322–323, 376–384, 386–388, 390–391, 461, 468, 527

Functions

Benchmark MA.6.9.2 Describe simple one–step functions using words and symbols when given a table of "input" and "output" values

48–51, 376–384, 386–388, 390–391, 461, 468

Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations

Numeric and Algebraic Representations

Benchmark MA.6.10.1 Interpret and solve problem situations involving two different variables

13, 376–377, 378–379, 380–381, 383–384, 388

Benchmark MA.6.10.2 Use fact families to solve for an unknown in an open sentence

These pages can be used to develop this Benchmark.

101, 106–107

Benchmark MA.6.10.3 Evaluate algebraic expressions

46–53

Strand: Data Analysis, Statistics, and Probability

Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA:

Pose questions and collect, organize, and represent data to answer those questions

Data Collection and Representation

Benchmark MA.6.11.1 Analyze how data collection methods and sample size can affect the results of data sets

502–504, 506–508

Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis

Data Interpretation

Benchmark MA.6.12.1 Determine and interpret the measures of center (mean, median, mode) of a data set and explain what each measure indicates about the data set

490–493, 499, 500–501

Benchmark MA.6.12.2 Use a stem–and–leaf plot to analyze a set of data

488–489

Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data

Predictions and Inferences

Benchmark MA.6.13.1 Make inferences about a population based on the interpretation of a sample data set

502–505

Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability

Probability

Benchmark MA.6.14.1 Compute probabilities of simple compound events (e.g., rolling two dice, using two different spinners at the same time)

534–535